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SHOPS
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PICTURE</th>
<th>PAGE</th>
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<tbody>
<tr>
<td>Silicones</td>
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<tr>
<td>Bitumen Mastics</td>
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<td>Acrylic Sealants UPVC &amp; All</td>
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<td>Weather Sealants</td>
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<td>Panel Adhesives Gripfill, PinkGrip</td>
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<td>&amp; Stixall Mirror Adhesives</td>
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<td>Fire Cements Intumescent Sealants</td>
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<td>PU Sealers (Polyurethane) Spray</td>
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<td>Sealer</td>
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<td>Polyurethane Foams (Gun Foam)</td>
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<td>Wood Glues PVA &amp; PUR Smart Tack</td>
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<td>Super Glues Contact Adhesives</td>
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<td>Rubber Glue</td>
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<td>Windscreen Adhesives</td>
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<td>Epoxy Resins Plastic Repair</td>
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<td>60-64</td>
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<tr>
<td>Thread Lock &amp; Pipe Sealants Flange</td>
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<td>Sealants</td>
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<td>Adhesive Tapes</td>
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<td>P.T.F.E Tapes</td>
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<td>82-83</td>
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<td>Gasket Sealers</td>
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<tr>
<td>Exhaust Paste</td>
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<td>86</td>
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<td>Chemical Anchor</td>
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<td>Liquid Metal Putty Repair Sticks</td>
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<td>Adhesive Cleaner</td>
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<td>Retro-reflective warning marking</td>
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<td>91-92</td>
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<tr>
<td>Tarp Repair Kit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SILICONE SEALANTS

Standard Grade

310 ml

Top quality acetoxy curing silicone. Conforms to BS 5889 type B. DIN 18545 part 2.

Please note: All Art. No. are available as single items.

Colour | Art. No.
--- | ---
Transparent | 0892 317 1
White | 0892 317 2
Grey | 0892 317 3
Brown | 0892 317 5
Black | 0892 317 6
Beige | 0892 317 9
Aluminium | 0892 317 10
Bronze | 0892 317 20

Low Modulus

310 ml

Neutral Curing

310 ml

All colours contain fungicide except transparent.

Colour | Art. No.
--- | ---
Transparent | 0892 317 71
White | 0892317 72
Brown | 0892 317 75

Neutral curing for use with PVCu. Conforms to ISO 11600, BS 5889 type A. All colours contain fungicide except transparent.

Colour | Art. No.
--- | ---
Transparent | 0892 310 1
White | 0892 310 2
Black | 0892 310 5
Brown | 0892 310 6
Oak | 0892 310 9
Bronze | 0892 310 14
### Joint Dimensions for 310 ml Cartridge

#### Width of joint (mm)

<table>
<thead>
<tr>
<th>Depth of joint (mm)</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>40</th>
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<td>5</td>
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<td>10.3</td>
<td>8.9</td>
<td>7.8</td>
<td>6.2</td>
<td>5.2</td>
<td>4.1</td>
<td>3.1</td>
<td>2.5</td>
<td>2.1</td>
<td>1.6</td>
</tr>
<tr>
<td>6</td>
<td>10.8</td>
<td>8.6</td>
<td>7.4</td>
<td>6.5</td>
<td>5.2</td>
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<td>2.1</td>
<td>1.7</td>
<td>1.3</td>
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<tr>
<td>7</td>
<td>8.9</td>
<td>7.4</td>
<td>6.3</td>
<td>5.5</td>
<td>4.4</td>
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<td>3.0</td>
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<tr>
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<td>1.3</td>
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<td>10</td>
<td>6.2</td>
<td>5.9</td>
<td>4.4</td>
<td>3.9</td>
<td>3.1</td>
<td>2.6</td>
<td>2.1</td>
<td>1.6</td>
<td>1.2</td>
<td>1.0</td>
<td>0.8</td>
</tr>
<tr>
<td>12</td>
<td>5.2</td>
<td>4.8</td>
<td>3.7</td>
<td>3.2</td>
<td>2.6</td>
<td>2.2</td>
<td>1.7</td>
<td>1.3</td>
<td>1.0</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>15</td>
<td>4.1</td>
<td>3.5</td>
<td>3.0</td>
<td>2.6</td>
<td>2.1</td>
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<td>1.4</td>
<td>1.0</td>
<td>0.8</td>
<td>0.7</td>
<td>0.5</td>
</tr>
<tr>
<td>20</td>
<td>3.1</td>
<td>2.6</td>
<td>2.2</td>
<td>1.9</td>
<td>1.6</td>
<td>1.3</td>
<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
<td>0.5</td>
<td>0.4</td>
</tr>
</tbody>
</table>

The highlighted boxes indicate optimum joint dimensions for expansion joints.

#### Joint dimensions

<table>
<thead>
<tr>
<th>Joint dimensions</th>
<th>Approximate number of tubes required per 100 metres for a given joint size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>mm</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>5 x 5</td>
<td>8</td>
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<tr>
<td>6 x 6</td>
<td>12</td>
</tr>
<tr>
<td>8 x 8</td>
<td>21</td>
</tr>
<tr>
<td>10 x 10</td>
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<tr>
<td>12 x 12</td>
<td>47</td>
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<tr>
<td>12 x 8</td>
<td>31</td>
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<tr>
<td>16 x 8</td>
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<td>20 x 10</td>
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<td>25 x 12</td>
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<td>30 x 15</td>
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<tr>
<td>35 x 18</td>
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<tr>
<td>40 x 20</td>
<td>258</td>
</tr>
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</table>
LOW MODULUS SILICONE

Product description
One-component, acid-curing, low-modulus silicone sealant for glazing and industrial applications. Low Modulus Silicone cures at room temperature under the action of atmospheric moisture to give a permanently flexible silicone rubber.

Special features
- solvent-free
- non-sag
- ready gunnability at low (+5°C) and high (+40°C) temperatures
- low shrinkage on curing
- flexible at low (-40°C) and high temperatures (+180°C)
- low-modulus: better adhesion and higher safety
- rapid crosslinking: quickly becomes tack-free
- adheres excellently to glass, vitrified surfaces, ceramic tiles, many plastics and most paints
- excellent tooling properties
- long shelf life

Application
- glass and windows construction
- sealing of joints between glazing and supporting structure (frame, tansoms, Mullions)
- industrial application as sealant in the automotive, aircraft and shipbuilding industries

Restrictions on use
Low Modulus Silicone should not be used on substrates such as marble, concrete, fibrous cement and mortar, as the product releases acetic acid during vulcanization.
Low Modulus Silicone should not be used in contact with metals such as lead, copper, brass or zinc due to corrosion.
Low Modulus Silicone may be discolored in contact with some organic elastomers, e.g. EPDM, APTK and neoprene. Low Modulus Silicone is not recommended for sealing of aquaria, please use our Low Modulus Silicone.
Low Modulus Silicone is not recommended for use on natural stone, such as marble, granite, quartzite, as it can cause staining.

Low Modulus Silicone is not recommended for structural glazing bonding.

Adhesion
Low Modulus Silicone exhibits excellent primerless adhesion to most non-porous siliceous material, e.g. glass, tiles, ceramics, enamel, glazed tiles and clinker; impregnated, varnished or painted wood; and some plastics.

Users must carry out their own tests due to the great variety of substances. The adhesion can be improved in many cases by pretreatment of the substrates with a primer. If adhesion difficulties arise please contact our technical service.

Processing
The substrate areas that will be in contact with the sealant must be clean, dry and free of all loose material, dust, dirt, rust, oil, and other contaminants. Non-porous substrates should be cleaned with a solvent and a clean, lint-free, cotton cloth. Remove residual solvent before it evaporates with a fresh clean, dry cloth.

Storage
The ‘Best use before end’ date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes
During vulcanization acetic acid is released. These vapors should not be inhaled for long periods or in high concentration. Hence, good ventilation of the work place is necessary. Should uncured silicone rubber come into contact with eyes or mucous membranes, the affected area must be rinsed thoroughly with water as irritation will otherwise be caused. Cured silicone rubber, however, can be handled without any risk to health. Comprehensive instructions are given in the corresponding Material Safety Data Sheets.
### Typical general characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Inspection Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product data (uncured)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density at 25 °C</td>
<td>ISO 1183-1 A</td>
<td>0,98 - 1,05 g/cm³</td>
</tr>
<tr>
<td>Consistency</td>
<td>ISO 7390, profile U 20</td>
<td>non-sag</td>
</tr>
<tr>
<td>Extrusion rate at 23 °C</td>
<td></td>
<td>450 ml/min</td>
</tr>
<tr>
<td>Skin forming time at 23 °C / 50 % r.h.</td>
<td></td>
<td>20 min</td>
</tr>
<tr>
<td><strong>Product data (cured)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>After 4 weeks’ storage at 23 °C / 50 % r.h.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile strength</td>
<td>ISO 8339</td>
<td>0,6 N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>ISO 8339</td>
<td>250 %</td>
</tr>
<tr>
<td>Modulus at 100 % elongation</td>
<td>ISO 8339</td>
<td>0,35 N/mm²</td>
</tr>
<tr>
<td>Hardness Shore A</td>
<td>ISO 868</td>
<td>20</td>
</tr>
<tr>
<td>Movement capability</td>
<td>ISO 11600</td>
<td>25 %</td>
</tr>
<tr>
<td>Tear strength</td>
<td>ISO 34, method C</td>
<td>4,2 N/mm</td>
</tr>
</tbody>
</table>

These figures are only intended as a guide and should not be used in preparing specifications.
**Low Modulus Silicone**

**Product description**

One-component, acid-curing, low-modulus silicone sealant for glazing and industrial applications. Low Modulus Silicone cures at room temperature under the action of atmospheric moisture to give a permanently flexible silicone rubber.

**Special features**

- mold retardant
- solvent-free
- non-sag
- ready gunnability at low (+5°C) and high (+40°C) temperatures
- low shrinkage on curing
- flexible at low (-40°C) and high temperatures (+180°C)
- low-modulus: better adhesion and higher safety
- rapid crosslinking: quickly becomes tack-free
- adheres excellently to glass, vitrified surfaces, ceramic tiles, many plastics and most paints
- excellent tooling properties
- long shelf life

**Application**

- glass and windows construction
- sealing of joints between glazing and supporting structure (frame, tansoms, mullions)
- sealing of joints exposed to high levels of moisture, e.g. sanitary field
- industrial application as sealant in the automotive, aircraft and shipbuilding industries

**Restrictions on use**

Low Modulus Silicone should not be used on substrates such as marble, granite, quartzite, as it can cause staining. Low Modulus Silicone is not suitable for insulating applications.

**Adhesion**

Low Modulus Silicone exhibits excellent primerless adhesion to most material used for sanitary application, e.g. glass, tiles, ceramics, enamel, glazed tiles and clinker; varnished or painted wood; and some plastics.

Users must carry out their own tests due to the great variety of substances. The adhesion can be improved in many cases by pretreatment of the substrates with a primer. If adhesion difficulties arise please contact our technical service.

**Processing**

The substrate areas that will be in contact with the sealant must be clean, dry and free of all loose material, dust, dirt, rust, oil, and other contaminants. Non-porous substrates should be cleaned with a solvent and a clean, lint-free, cotton cloth. Remove residual solvent before it evaporates with a fresh clean, dry cloth.

**Storage**

The ‘Best use before end’ date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

**Safety notes**

During vulcanization acetic acid is released. These vapors should not be inhaled for long periods or in high concentration. Hence, good ventilation of the work place is necessary. Should uncured silicone rubber come into contact with eyes or mucous membranes, the affected area must be rinsed thoroughly with water as irritation will otherwise be caused. Cured silicone rubber, however, can be handled without any risk to health.
### PRODUCT DATA

<table>
<thead>
<tr>
<th>Typical general characteristics</th>
<th>Inspection Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product data (uncured)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density at 25 °C</td>
<td>ISO 1183-1 A</td>
<td>0,98 - 1,05 g/cm³</td>
</tr>
<tr>
<td>Consistency</td>
<td>ISO 7390, profile U 20</td>
<td>non-sag</td>
</tr>
<tr>
<td>Extrusion rate at 23 °C</td>
<td></td>
<td>450 ml/min</td>
</tr>
<tr>
<td>Skin forming time at 23 °C / 50 % r.h.</td>
<td></td>
<td>20 min</td>
</tr>
</tbody>
</table>

**Product data (cured)**  
*After 4 weeks’ storage at 23 °C / 50 % r.h.*

<table>
<thead>
<tr>
<th></th>
<th>Inspection Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength</td>
<td>ISO 8339</td>
<td>0,6 N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>ISO 8339</td>
<td>250 %</td>
</tr>
<tr>
<td>Modulus at 100 % elongation</td>
<td>ISO 8339</td>
<td>0,35 N/mm²</td>
</tr>
<tr>
<td>Hardness Shore A</td>
<td>ISO 868</td>
<td>20</td>
</tr>
<tr>
<td>Movement capability</td>
<td>ISO 11600</td>
<td>25 %</td>
</tr>
<tr>
<td>Tear strength</td>
<td>ISO 34, method C</td>
<td>4,2 N/mm</td>
</tr>
</tbody>
</table>

These figures are only intended as a guide and should not be used in preparing specifications.
**SILICONE ACETATE (STANDARD GRADE)**

**Product description**

One-component, acid-curing, silicone sealant for general-purpose sealing. Silicone Acetate - std cures at room temperature under the action of atmospheric moisture to give a permanently flexible silicone rubber.

**Special features**

- non-sag
- ready gunnability at low (+5°C) and high (+40°C) temperatures
- flexible at low (-40°C) and high temperatures (+100°C)
- rapid crosslinking: quickly becomes tack-free
- available in a wide range of colors
- excellent tooling properties for professional use

**Application**

- Sealing of connecting and expansion joints in indoor applications and for bonding and mending tasks.

**Restrictions on use**

Silicone Acetate - std should not be used on substrates such as marble, concrete, fibrous cement and mortar, as the product releases acetic acid during vulcanization. Silicone Acetate - std should not be used in contact with metals such as lead, copper, brass or zinc due to corrosion. Silicone Acetate - std may be discolored in contact with some organic elastomers, e.g. EPDM, APTK and neoprene. Silicone Acetate - std should not be used for sealing of aquaria. Silicone Acetate - std is not recommended for use on natural stone, such as marble, granite, quartzite, as it can cause staining. Silicone Acetate - std is not recommended for structural glazing bonding.

**Adhesion**

Silicone Acetate - std exhibits excellent primerless adhesion to most non-porous siliceous material, e.g. glass, tiles, ceramics, enamel, glazed tiles and clinker; impregnated, varnished or painted wood; and some plastics. Users must carry out their own tests due to the great variety of substances. The adhesion can be improved in many cases by pretreatment of the substrates with a primer. If adhesion difficulties arise please contact our technical service.

**Processing**

The substrate areas that will be in contact with the sealant must be clean, dry and free of all loose material, dust, dirt, rust, oil, and other contaminants. Non-porous substrates should be cleaned with a solvent and a clean, lint-free, cotton cloth. Remove residual solvent before it evaporates with a fresh clean, dry cloth.

**Storage**

The ‘Best use before end’ date of each batch is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

**Safety notes**

During vulcanization acetic acid is released. These vapors should not be inhaled for long periods or in high concentration. Hence, good ventilation of the work place is necessary. Should uncured silicone rubber come into contact with eyes or mucous membranes, the affected area must be rinsed thoroughly with water as irritation will otherwise be caused. Cured silicone rubber, however, can be handled without any risk to health.
## PRODUCT DATA

<table>
<thead>
<tr>
<th>Typical general characteristics</th>
<th>Inspection Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product data (uncured)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density at 25 °C</td>
<td>ISO 1183-1 A</td>
<td>0.98 - 1.05 g/cm³</td>
</tr>
<tr>
<td>Consistency</td>
<td>ISO 7390, profile U 20</td>
<td>non-sag</td>
</tr>
<tr>
<td>Extrusion rate at 23 °C</td>
<td></td>
<td>500 ml/min</td>
</tr>
<tr>
<td>Skin forming time at 23 °C / 50 % r.h.</td>
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<td>20 min</td>
</tr>
<tr>
<td><strong>Product data (cured)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>After 4 weeks' storage at 23 °C / 50 % rh</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile strength</td>
<td>ISO 8339</td>
<td>0.7 N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>ISO 8339</td>
<td>250 %</td>
</tr>
<tr>
<td>Modulus at 100 % elongation</td>
<td>ISO 8339</td>
<td>0.38 N/mm²</td>
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<tr>
<td>Hardness Shore A</td>
<td>ISO 868</td>
<td>18</td>
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<tr>
<td>Movement capability</td>
<td>ISO 11600</td>
<td>25 %</td>
</tr>
<tr>
<td>Tear strength</td>
<td>ISO 34, method C</td>
<td>4.5 N/mm</td>
</tr>
</tbody>
</table>

These figures are only intended as a guide and should not be used in preparing specifications.
Product description

Silicone Neutral Premium is a one-part, neutral-curing, low modulus silicone sealant with excellent adhesion and long shelf life for perimeter sealing and glazing and sanitary applications.

Properties

Silicone Neutral Premium cures at room temperature under the action of atmospheric moisture to give a permanently flexible silicone rubber.

Special features

- suitable for use in sanitary areas
- long shelf life
- primerless adhesion to most materials
- non-corrosive to metals
- suitable for alkaline substrates such as concrete, mortar, fibrous cement
- almost odorless
- non-sag
- ready gunnability at low (+5°C) and high (+40°C) temperatures
- rapid crosslinking; quickly becomes tack-free
- flexible at low (-40°C) and high temperatures (+150°C)
- excellent weatherability

Application

- sealing of connecting and expansion joints in the building industry
- sealing of joints in sanitary applications
- sealing of perimeter joints

Restrictions on use

Silicone Neutral Premium must not be used as a secondary sealant in insulating glass units. Silicone Neutral Premium must not be used for structural glazing bonding. All building materials that come in contact with Silicone Neutral Premium such as solid adjacent substrates, liquids or gaseous vapors of other building materials must be compatible with Silicone Neutral Premium and must not trigger any chemical or physical changing that might result in discoloring of the sealant or deterioration of its functional capability. For any arising inquiry about the compatibility of building materials with Silicone Neutral Premium please consult the building material's manufacturer. Silicone Neutral Premium is not suitable for use on natural stones, such as marble, granite, quartzite, as it can cause staining. Silicone Neutral Premium is not recommended for sealing of aquaria or for the longer-term use under water. Silicone Neutral Premium is not suitable for food contact applications. When using Silicone Neutral Premium in permanently wet areas where the joint is strongly or permanently exposed to water, e.g. in swimming pools or public sanitary facilities, please contact our technical service. Silicone Neutral Premium is not suitable for use as a mirror adhesive. The time until complete curing may be extended at lower temperature, lower humidity, increasing film thickness or by low volume of air exchange.

Adhesion

Silicone Neutral Premium exhibits excellent primerless adhesion to most material used for sanitary application, e.g. glass, tiles, ceramics, enamel, glazed tiles and clinker; on metals, e.g. Aluminum, steel, zinc, copper, on varnished or painted wood; and some plastics. Users must carry out their own tests due to the great variety of substances. The adhesion can be improved in many cases by pretreatment of the substrates with a primer. If adhesion difficulties arise please contact our technical service.

Processing

The substrate areas that will be in contact with the sealant must be clean, dry and free of all loose material such as dust, dirt, rust, oil and other contaminants. Non-porous substrates should be cleaned with a solvent and a clean, lint-free, cotton cloth. Remove residual solvent before it evaporates with a fresh clean, dry cloth.

Storage

The ‘Best use before end’ date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

During vulcanization ethanol is released. These vapors should not be inhaled for long periods or in high concentration. Hence, good ventilation of the work place is necessary. Should unvulcanized RTV-1 silicone rubber come into contact with eyes or mucous membranes, the affected area must be rinsed thoroughly with water as irritation will otherwise be caused. Cured silicone rubber, however, can be handled without any risk to health.

Keep away from children.
# PRODUCT DATA

<table>
<thead>
<tr>
<th>Typical general characteristics</th>
<th>Inspection Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unvulcanized rubber</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density at 20 °C</td>
<td>DIN 51757</td>
<td>1,01 g/cm³</td>
</tr>
<tr>
<td>Consistency</td>
<td>ISO 7390</td>
<td>non-sag</td>
</tr>
<tr>
<td>Extrusion rate at 23 °C</td>
<td></td>
<td>300 ml/min</td>
</tr>
<tr>
<td>Skin forming time at 23 °C / 50 % r.h.</td>
<td></td>
<td>approx. 35 min</td>
</tr>
<tr>
<td>Curing at 23 °C / 50 % RLF</td>
<td></td>
<td>approx. 2 mm/day</td>
</tr>
<tr>
<td><strong>Vulcanized rubber After 4 weeks´storage at 23°C / 50 % r.h.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile strength</td>
<td>ISO 8339</td>
<td>0,7 N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>ISO 8339</td>
<td>300 %</td>
</tr>
<tr>
<td>Modulus at 100 % elongation</td>
<td>ISO 8339</td>
<td>0,37 N/mm²</td>
</tr>
<tr>
<td>Hardness Shore A</td>
<td>ISO 868</td>
<td>24</td>
</tr>
<tr>
<td>Movement capability</td>
<td>ISO 11600</td>
<td>25 %</td>
</tr>
<tr>
<td>Tear strength</td>
<td>ISO 34, method C</td>
<td>4,5 N/mm</td>
</tr>
</tbody>
</table>

These figures are only intended as a guide and should not be used in preparing specifications.
Product description
Silicone Neutral is a one-part, neutral-curing, low modulus silicone sealant with good adhesion and long shelf life for DIY-sector.

Properties
Silicone Neutral cures at room temperature under the action of atmospheric moisture to give a permanently flexible silicone rubber.

Special features
- long shelf life
- primerless adhesion to most materials
- non-corrosive to metals
- suitable for alkaline substrates such as concrete, mortar, fibrous cement
- almost odorless
- non-sag
- ready gunnability at low (+5°C) and high (+40°C) temperatures
- rapid crosslinking: quickly becomes tack-free
- flexible at low (-40°C) and high temperatures (+120°C)
- good weatherability

Application
- sealing of low stress connection and expansion joints in the building industry - sealing of low stress perimeter joints

Restrictions on use
Silicone Neutral must not be used as a secondary sealant in insulating glass units. Silicone Neutral must not be used for structural glazing bonding.

All building materials that come in contact with Silicone Neutral such as solid adjacent substrates, liquids or gaseous vapors of other building materials must be compatible with Silicone Neutral and must not trigger any chemical or physical changing that might result in discoloring of the sealant or deterioration of its functional capability. For any arising inquiry about the compatibility of building materials with Silicone Neutral please consult the building material’s manufacturer. Silicone Neutral is not suitable for use on natural stones, such as marble, granite, quartzite, as it can cause staining. Silicone Neutral is not recommended for sealing of aquaria or for the longer-term use under water. Silicone Neutral is not suitable for food contact applications. Silicone Neutral is not suitable for use as a mirror adhesive. The time until complete curing may be extended at lower temperature, lower humidity, increasing film thickness or by low volume of air exchange.

Adhesion
Silicone Neutral exhibits good primerless adhesion to most of the substrates used in DIY-applications, e.g. glass, tiles, ceramics, enamel, glazed tiles and clinker; metals, e.g. aluminium, steel, zinc or copper; impregnated, varnished or painted wood; and many plastics. Users must carry out their own tests due to the great variety of substances. The adhesion can be improved in many cases by pretreatment of the substrates with a primer. If adhesion difficulties arise please contact our technical service.

Processing
The substrate areas that will be in contact with the sealant must be clean, dry and free of all loose material such as dust, dirt, rust, oil and other contaminants. Non-porous substrates should be cleaned with a solvent and a clean, lint-free, cotton cloth. Remove residual solvent before it evaporates with a fresh clean, dry cloth.

Storage
The ‘Best use before end’ date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes
During vulcanization ethanol is released. These vapors should not be inhaled for long periods or in high concentration. Hence, good ventilation of the work place is necessary. Should unvulcanized RTV-1 silicone rubber come into contact with eyes or mucous membranes, the affected area must be rinsed thoroughly with water as irritation will otherwise be caused. Cured silicone rubber, however, can be handled without any risk to health.

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<td>Consistency</td>
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<td></td>
</tr>
<tr>
<td>Tensile strength</td>
<td>ISO 8339</td>
<td>0.5 N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>ISO 8339</td>
<td>250 %</td>
</tr>
<tr>
<td>Modulus at 100 % elongation</td>
<td>ISO 8339</td>
<td>0.37 N/mm²</td>
</tr>
<tr>
<td>Hardness Shore A</td>
<td>ISO 868</td>
<td>24</td>
</tr>
<tr>
<td>Movement capability</td>
<td>ISO 11600</td>
<td>20 %</td>
</tr>
<tr>
<td>Tear strength</td>
<td>ISO 34, method C</td>
<td>3.0 N/mm</td>
</tr>
</tbody>
</table>

These figures are only intended as a guide and should not be used in preparing specifications.
**SILICONE COLOUR**

**High-quality multifunctional sealant in individual RAL colors.**

**Available in individual RAL colors**
The color option (approx. 180 RAL colors) offers unlimited design possibilities for indoor and outdoor expansion and connecting joints.

**Anti-fungal properties**
Prevents mold especially in plumbing applications

**Adhesion spectrum**
Can be used on virtually all common construction surfaces

**Properties:**
- Certified in accordance with DIN ISO 11600 F-25HM
- Material Class B2 according to DIN 4102
- Without softeners, therefore suitable for use on natural stone
- Permanently elastic
- UV-resistant
- Compatible with paint
- Weather-resistant

1 The permanence of the anti-fungal effect is dependent on the moisture load and the ventilation behavior.

**Typical application surfaces:**
**Without primer:** Glass, aluminum (untreated, painted, glazed), all types of metal, enamels, tiles, glazed ceramic, natural stone (e.g. granite, marble), wood, a broad range of plastics

**With silicone primer:** Concrete, aerated concrete, chalky sandstone, clinker, brick, gypsum and plaster (observe information in the building material compatibility table for sealants)

**Color options:** All RAL colors in accordance with the RAL Color Card (Art. No. 0705 800 010) are available, except for all neon and metallic colors. Attention! Silicone Color is a special product for individual customers. For production reasons, minor fluctuations in the color can occur. This is not a product defect. No exchange possible. Carry out color matching with existing material prior to application.

**Notes:** Cannot be painted and plastered over. Not suitable for use underwater or in aquariums. Does not adhere to polypropylene, polyethylene, PTFE and bitumen. Silicone Color is not suitable for adhesive bonding or filling hollow spaces. Due to the large number of existing paint and glazing formulas, especially on alkyd resin paints and powder-coated aluminum, it is necessary to conduct an adhesion check with your own tests. Danger of yellowing on contact with white alkyd resin paints cannot be excluded.

---

### Container Contents ml | Art No.: | Pack / Qty.
--- | --- | ---
Cartridge | 310 ml | 0892 580 0 | 12

*Minimum quantity 24 pcs.*
Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. absorption of continuous movement</td>
<td>25 % of joint width</td>
</tr>
<tr>
<td>Skin-forming time</td>
<td>approx. 10 – 15 min; at 23°C / 50 % rel. humidity</td>
</tr>
<tr>
<td>Curing speed</td>
<td>approx. 2 mm / 24 h; at 23°C / 50 % rel. humidity</td>
</tr>
<tr>
<td>Temperature stability</td>
<td>- 40°C to +120°C</td>
</tr>
<tr>
<td>Working temperature</td>
<td>+ 5°C to + 40°C</td>
</tr>
<tr>
<td>Can be painted over</td>
<td>No</td>
</tr>
<tr>
<td>Compatibility with paint</td>
<td>Yes</td>
</tr>
<tr>
<td>Contains fungicide</td>
<td>Yes</td>
</tr>
<tr>
<td>Shore-A hardness</td>
<td>approx. 20</td>
</tr>
<tr>
<td>Density</td>
<td>1.03 g/cm³</td>
</tr>
<tr>
<td>Elongation at failure with 2 mm film</td>
<td>approx. 600 %</td>
</tr>
<tr>
<td>Shelf life (with cool, frost-free storage)</td>
<td>9 months</td>
</tr>
</tbody>
</table>

With this information, we want to advise you to the best of our knowledge based on our tests and experience. Preliminary testing required! For further information, see the Technical Data Sheet.

Your procedure for obtaining individually produced special silicone colors:

1. Entry of article number 0892 580 0
2. Selection of the desired RAL color based on the RAL color card (Art. No. 0705 800 010) and specification of the RAL number. Color specification in the system is always carried out with the RAL No. in the order-related text. Please note: Neon and metallic colors cannot be produced for technical reasons (RAL No.: 1026, 2005, 2007, 3024, 3026, 9006 and 9007).
3. Specification of the quantity. This must always be a multiple of the packing unit 12.
4. Order is sent and conveyed to Production.
5. Production of the Silicone Color in the desired RAL color for the individual customer. **Note:** Silicone Color is a special product for individual customers. For production reasons, minor fluctuations in the color can occur. This is not a product defect. No exchange possible. Carry out color matching with existing material prior to application.
6. After 20 working days you receive your Silicone Color produced in your individual color.

Additional article

<table>
<thead>
<tr>
<th>Article</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAL Color Card</td>
<td>0705 800 010</td>
</tr>
<tr>
<td>Cartridge Gun</td>
<td>0891 ff.</td>
</tr>
<tr>
<td>Silicone Primer</td>
<td>0892 170</td>
</tr>
<tr>
<td>Joint Smoother</td>
<td>0891 18 ff.</td>
</tr>
<tr>
<td>Sealant Smoothing Agent</td>
<td>0893</td>
</tr>
<tr>
<td>3/003PE Backfill Material</td>
<td>0875 ff.</td>
</tr>
<tr>
<td>Cartridge Knife</td>
<td>0715 66 09</td>
</tr>
</tbody>
</table>
Advanced silicone with food safe anti fungal compound.

Art. No. 892.555
Colour: White    Pack/Qty.: 1

- For refrigeration and food preparation areas.
- Forms a permanently flexible, hygienic seal.
- Sticks best to metals, most plastics, ceramics and glass.
- For interior use.
- Shelf life: 12 months.

Description
High modulus acetic cure fungicidal silicone sealant and adhesive designed specifically for sealing refrigeration units and areas where repeated food contact is likely.

Advantages
- Mould resistant - will not taint food.
- Safe for repeated food contact.
- Meets the US Federal Food & Drug Administration (FDA) Regulations.
- Contains fungicide - highly resistant to mildew and mould growth.
- Fast cure (tack free in one hour).
- Movement accommodation of +/- 25%.
- Excellent adhesion to most non-porous surfaces.
- Temperature resistant to 150°C.

Areas of use
- For sealing in refrigeration units.
- Sealing worktops/ kitchens (domestic and industrial) where food contact is likely.
- Seals ceramics, porcelain, vitreous enamel, glass, metals and most plastics/plastic coated metals.

Application
- All surfaces to be sealed must be sound, dry and clean.
- Cut the tip of the cartridge taking care not to damage the thread.
- Apply nozzle and cut cleanly at an angle of 45 degrees with an opening slightly larger than the gap to be sealed.
- Apply using a standard sealant gun. Best results will be obtained by keeping an even pressure on the gun trigger and keeping the gun at a constant angle to the surfaces to be sealed.
- To ensure a proper bond, always smooth down sealant using a spatula or piece of wood wetted with soap and water solution.
- Tool down within 15 minutes of application.
- An improved appearance can be achieved by placing masking tape to both sides of the joint, removing within 5 minutes of application.

Note:
Do not use on porous surfaces (such as brick, concrete and stone), on soft metals (such as lead), on surfaces that bleed oils or plastics and do not use externally (susceptible to UV radiation).
For filling joints with bitumen strips.

- Excellent adhesion on bitumen strips.

**Your advantage:**
Seals roof sheeting and roofing paper very reliably.
Good adhesion on damp surfaces.

**Your advantage:**
Use largely independent of weather conditions.
Suitable for emergency repairs.

**Other advantages:**
Resistant to ageing and weathering.
Suitable for elastic moulding.

**Applications:**
For sealing off roof sheeting and roofing paper. For filling in joints of roof passages, e.g. domed roof lights, ventilation ducts, antennas or chimneys, as well as edge connections. Suitable for emergency repairs.

**Typical application surfaces:**
without primer: bitumen, zinc plating, copper plating, stainless steel, concrete, clinker. By very porous surface use primer, Art. No. 08972 875.

---

**Technical Data**

<table>
<thead>
<tr>
<th>Container</th>
<th>Contents ml</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartridge</td>
<td>310</td>
<td>0890 103</td>
<td>12</td>
</tr>
</tbody>
</table>

- **Raw material base**: Bitumen
- **Primer**: Not required.
- **Max. absorption of contin. movement**: 10%
- **Skin formation time**: Approx. 30 min at +23°C and 50% rel. humidity
- **Curing speed**: Approx. 1mm after 24 hrs. at +23°C and 50% rel. humidity
- **Thermal stability**: -35°C to +110°C
- **Application temperature**: +5°C to +35°C
- **Can be painted over**: No
- **Compatibility with paint**: No
- **Contains fungicide**: No
- **Shore A hardness**: -
- **Density**: Approx. 1.38 g/m³
- **Elongation at rupture with 2 mm film**: -
- **Shelf life**: 12 months
ACRYLIC SEALANT

Can be smoothed with water and over-painted.

For sealing
- Joints where strain and expansion requirements are low.
- Connecting and sealing joints in interior extensions.
- Cracks in walls, plaster, concrete.
- Adhesion of stropore.
- Not suitable for glazing in window installations or for expansion joints and substrates such as glass, enamel and ceramic.
- Limited outdoor applications, as it is soluble in water in un-hardened state.

Properties
- Single component sealant based on dispersed acrylic resin.
- Free of solvents and silicone.
- Resistant to ageing, weather and UV rays once hardened.
- Can be painted over with commercially available colours and lacquers. Individual test necessary.
- Good adhesion on various building materials such as concrete, porous concrete, plaster, walling, asbestos cement, wood, plasterboard, etc.

Please note:
The substrate must be clean and free of frost and grease. The joint should be approximately half as deep as it is wide. The correct depth of the joint should be achieved by refilling with foam material. This will also prevent three-point adhesion. Acrylic sealant should not be over painted before it has hardened. A subcoat will improve adhesion on porous and absorbent substructures such as cement, concrete, etc. Sub coat is between 1:1 and 1:5 acrylic sealant to water.

<table>
<thead>
<tr>
<th>Colour</th>
<th>Illu.</th>
<th>Contents ml</th>
<th>Art No.</th>
<th>Pack/Qty</th>
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<tr>
<td>Beige</td>
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<td>310ml</td>
<td>892.164</td>
<td>1</td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td>9892.900.1</td>
<td>1</td>
</tr>
<tr>
<td>Brown</td>
<td></td>
<td></td>
<td>9892.900.2</td>
<td>1</td>
</tr>
</tbody>
</table>

Technical Data
- Raw material base: Acrylic resin dispersion
- Shelf life: at + 20°C, 1 year (protect from frost)
- Skin formation time (finger test): approx. 15 min. at + 23°C and 50% rel. air humidity
- Shore hardness A: approx. 30
- Recovery: approx. 50%
- Density: 1.5 g/cm³
- Temperature resistance: -25°C to + 80°C
- Hardening rate in 24 hours at + 23°C/50% rel. air humidity: approx. 1 min.
- Elongation at fracture: approx. 150% after 7 days storage at room temperature & 7 days at 50°C
- Change in volume: approx. 15%

Notes on handling:
Avoiding three point adhesion: When applying a sealant, care must be taken to ensure that it adheres on a substrate. Stress cracking can result from movement and a 100% seal of the joint should be achieved by using a backfill material to avoid three-point adhesion.

It is our intention to advise you to the best of our ability, drawing on past experience and tests. However, due to the variety of applications and the conditions governing storage and application, which lie outside our control, we are not in a position to accept responsibility for individual results. This also applies if our non-binding technical and customer service is availed of. We always recommend individual tests. Consistent quality of our products is guaranteed. Subject to technical modifications and further development.
**ALL WEATHER SEALANT**

**White**
- Art. No. 9892.900.8
- Contents: 310 ml
- Pack/Qty.: 1

**Clear**
- Art. No. 9892.900.9
- Contents: 310 ml
- Pack/Qty.: 1

All Weather Sealant is a multi-use sealant based on an advanced acrylic formula that provides the ultimate sealant technology for adhesion to all surfaces, application in wet weather and even to wet surfaces. The sealant remains permanently flexible and can be overpainted with most paints and wood stains when cured if required.

**Areas of Use**
- For all roofline applications, adheres to problematic materials such as lead, bitumen and galvanized steel.
- Ideal for sealing around lead flashing, gutters, downpipes and corrugated roofing.
- For perimeter pointing to all window and door frames and all weathersealing applications externally, ideal for timber frames where wood staining is required.
- For sealing between metal and composite roof and wall panel forms and effective lap joint sealant.
- For remedial sealing over all other sealants and old putties, mastic, industrial metal panel sealing, caravan and automotive areas.

**ONE HOUR CAULK SEALER**

**White**
- Art. No. 9892.900.5
- Contents: 400 ml
- Pack/Qty.: 1

- One Hour Caulk is a fast drying flexible decorators filler and sealant that remains permanently flexible.
- Based on a high quality acrylic formulation One Hour Caulk can be overpainted with all paint types or covered over with wallpaper.
- Painting can be carried out as soon as a skin forms, after approximately one hour, no sanding down is required.

**Areas of Use**
- For sealing and filling cracks and gaps between two different substrates prior to decorating, the use of One Hour Caulk prevents unsightly cracks appearing at a later stage.
- Use around - skirting boards, ceiling cornices, window and door frames, stair treads and risings, cupboards and other fixtures adjoining walls.
- Gaps, cracks and damage to plaster can also be filled using One Hour Caulk.
UPVC GAP FILLER & SEALANT

- Seals and joins gaps between rigid PVC, brickwork.
- Water resistant.
- UV stabilised.
- Bacteria resistant.
- Cures rapidly to provide a colour fast finish.
- Not suitable for use on expanded or foil wrapped PVC or PVC trim.
- Shelf life: see expiry date on tube or outer packaging.

Methods of use
- Mix of PVC resins and solvents, suitable for bonding many materials including rigid and plasticized PVC and coated metals.
- Widely used in the window industry for frames and attachments.
- Once cured it has no smell, retains its flexibility in use for any long periods of time.
- Good slump resistance.
- Sealed joints move with the substrate and remain water-tight.
- The UPVC Gap Filler & Sealant is quite viscous and has very good gap filling properties.

Directions for use
- Ensure surfaces to be bonded are clear, dry and free from grease by cleaning with the UPVC Gap Filler & Sealant.
- Where bonding without gap filling being required, one surface should be coated lightly with adhesive and brought together whilst still wet.
- For gap filling use the UPVC Gap Filler & Sealant.
- Apply a thick layer of filler and allow for shrinkage after curing.
- Care must be taken to ensure that solvents can evaporate freely.
- Due to the variety of materials on the market and the fact that Würth Ireland Ltd. cannot know all the uses that its products are put to.
- It is the user’s responsibility to determine suitability of use and compatibility with the products being bonded or sealed.

<table>
<thead>
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<th>Art No.:</th>
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<td>Cartridge</td>
<td>White</td>
<td>300</td>
<td>01892 030</td>
<td>1</td>
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</tbody>
</table>
MULTISTICK PANEL ADHESIVE

A high quality, one part gunable SBR adhesive (synthetic butyl rubber).
• Ideal for panel and batten bonding.
• High body gives gap filling properties.
• Excellent bonding characteristics.
• Fast panel construction without nails, screws or fixing strips.
• High slump resistance.

Uses
This highly versatile adhesive will permanently bond panel materials, insulation products, carpets grippers etc. most building surfaces.
DO NOT USE with expanded polystyrene.

Technical data
Product type: filled polychloroprene / phenolic resin
Colour: pale cream.
Viscosity: heavy paste.
Clean up solvent: 8901.100.026
Flash point: -22°C (-8°F).

Application
1) Preparation (for maximum bond integrity)
• Precondition adhesive and materials to be bonded @ 15°C - 20°C (60°F - 68°F).
• Surfaces should be free of grease and dust.
2) Gunning
• Cut nozzle to give required line size (3 - 6 mm dia.) depending on gap to be filled. Pierce inner seal.
• Apply lines of adhesive at approx. 30 cm centres to surface to be bonded.

Assembly
For light panel materials press firmly onto adhesive immediately and leave to set. For heavier materials or those with pronounced bowing, press firmly onto adhesive as above, then break bond and hinge panel away. Allow panel adhesive to dry for 10 - 20 minutes depending on adhesive coating and ambient conditions. Remake bond. Press well, preferably using mallet or wood block to ensure firm bond. Maximum adhesive performance is dependent on sufficient pressure being applied.

Handling precautions
1. Do not smoke. Keep away from all other sources of ignition.
2. Use only in well ventilated areas to conform with the current Occupational Exposure Limits. Avoid breathing vapours.
3. Avoid contact with skin and eyes. Wear suitable protective clothing, impervious gloves (e.g. of neoprene or nitrile rubber) and goggles. To meet BS 2092.
4. Store in a secure environment away from sources of ignition. If in confined space, the vapour will cause drowsiness. A localised extraction system using flameproof equipment must be used. Alternatively suitable respiratory equipment must be worn.

Storage
Ideal storage temperature 15°C - 20°C (60°F - 68°F).
DO NOT STORE BELOW 10°C (50°F).
Storage - 6 months in closed containers @ 20°C (68°F) under cover in a dry area.

Note:
Temperatures above 20°C (68°F) will reduce storage life.

Health and safety
For further information please consult the relevant Würth Ireland Ltd. Hazard Data Sheet.
Description:
Solvent free building adhesive is a low odour general-purpose high bond strength adhesive using unique polymer technology eliminating the need for solvents. Quick drying but with ample open time for positioning, sandable and over-paintable, adheres to virtually any building and construction materials including polystyrene. For interior and exterior use, rough, smooth, vertical or horizontal surfaces. Non-flammable. Re-sealable nozzle.

Application
- Fixing skirting boards, architraves and dado rails.
- Bonding timber frames to brick and stone.
- Fixing wall panels to battens.
- Bonding floor grippers and metal edges (on porous surfaces).
- Wood to wood bonding.
- Bedding and bonding worktops to units.
- Fixing loose roof tiles and slates.
- Laying carpet and carpet tiles.
- Bedding and bonding windowsills.
- Fixing plasterboard panels partitioning.
- General DIY and repairs.
- Fixing polystyrene and architraves.

Limitations
Solvent free building adhesive should not be applied in permanently damp or wet areas.

Technical data
Base: advanced polymer.
Solids: 80 +/- 2%.
Viscosity: viscous paste.
Colour: beige.
Tack time: 10 - 15 minutes.
Coverage: 11m per cartridge with 6 mm bead.
Flash point: N/a.
Shelf life: 12 months when stored between 4 °C and 25°C.
Permanently flexible adhesive and sealant

Based on new hybrid PMS polymer technology - STIXALL is the ultimate building adhesive and sealant. It has the power to bond and seal virtually EVERYTHING to ANYTHING!

It offers almost limitless benefits as a permanently flexible adhesive and a sealant, removing the application barriers associated with conventional products.

- Incredible initial grab, no slip, gap filling.
- High bond strength.
- Exterior & interior use.
- Can be applied to wet surfaces.
- Totally waterproof.
- Overpaintable.
- Stops mould growth.
- Solvent free.
- Resistant to temperature extremes.
- Resistant to chemicals.
- Quick curing.

Applications:
Bonds to virtually all materials porous and non-porous such as Glass, Marble, Granite, Mirrors, Bricks, Stone, Plaster Rose, Concretes, All Metals, All Hard Plastics, Ceramics, Fibreglass, Timber and much, much more...

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>01893 100 100</td>
<td>White</td>
</tr>
<tr>
<td>01893 100 101</td>
<td>Black</td>
</tr>
<tr>
<td>01893 100 102</td>
<td>Grey</td>
</tr>
<tr>
<td>01893 100 103</td>
<td>Brown</td>
</tr>
<tr>
<td>01893 100 104</td>
<td>Clear</td>
</tr>
</tbody>
</table>
What goes up won’t come down.

Art. No. 8921.100.390
Pack/Qty.: 12

- Amazing grabbing powers - grips instantly.
- No need to pin under the workpiece.
- No need for double-stick methods.
- Can be used inside and out.
- Adheres to most building substrates.
- Firm favourite with tradesmen.

Comparison between the Pink Grip and any other grip
Description
GRIPFILL™ is a solvent-borne, filled rubber resin adhesive, developed to bond virtually any rigid materials together, regardless of the evenness of the surfaces.

Uses
GRIPFILL™ is a high strength, one-part gap-filling adhesive specially formulated to bond a large variety of materials, such as plywood, blockwood, chipboard, hardboard, laminated plastics, uPVC (excluding foamed PVC), rigid insulation materials (excluding expanded polystyrene), metal sheeting (including aluminium, steel, galvanised iron, tin plate and non-ferrous metals) to themselves or to brick, stone and breeze block, sand/cement screeds, concrete, plaster, plasterboard and insulation boards. If further details of a particular application are required, please contact our Technical Department.

GRIPFILL™ is suitable for bonding aluminium and uPVC stair nosings, carpet-edging strips, carpet grippers, building boards, timber battens, etc. to stairs, floorboards and walls.

GRIPFILL™ can also be used successfully for bonding wall signs, window frames, sink units, fitted furniture (including light fittings) to a variety of surfaces; in the building of home extensions, caravans and cars.

Although GRIPFILL™ will bond mirrors, care should be taken to ensure no reaction takes place with the coating, as this may occasionally occur.

Where GRIPFILL™ is used externally, it must be protected from driving rain, ponding water or permanently wet situations. This can be achieved by use of a silicone sealant.

Application
Fix the cartridge into the extruder. Cut the nozzle to the desired width and angle and push a nail through the nozzle to break the seal at the base.

a) Star Nosing, Window Frames etc.
Apply a continuous bead (usually 6 mm in dia.) to the surface being bonded. Position on the substrate, if possible by sliding into place and apply pressure overall. If the object is to be applied to a vertical surface, temporary mechanical support (e.g. panel pins, masonry nails etc) may be required. Allow to dry overnight prior to any further operation e.g. fixing boards to battens, etc.

b) Wall Panels
For most work, GRIPFILL™ should be applied as a bead approximately 6 mm diameter rear of the panel. Extrude a continuous bead around the panel approximately 25 mm from the edge. Additional beads should then be applied across the panel at 600 mm centres (450 mm for heavy panels). Immediately present the panel to the wall slightly above its required position and applying pressure slide it into place in order to break any surface skin. Press firmly to ensure maximum overall contact, using a soft mallet if necessary. Continue as above with further panels making sure they are flush with each other. Any adjustment must be made within 5 minutes of placing.

Alternatively, GRIPFILL™ may be applied in the form of blobs approximately 10 - 12 mm in diameter at 300 mm centres, in rows either 450 mm or 600 mm across the board (depending upon the weight as above). The blob application is not recommended when bonding plastic.

c) Impervious Materials
Where two impervious materials are to be bonded, apply GRIPFILL™ as above, press firmly together and break the bond by pulling away immediately ensuring good transfer has occurred. Wait for approximately 5 minutes and rebond the two materials.

Preparation
Surfaces to be bonded must be clean, structurally sound, dry and free from dust and loose material. Porous surfaces, such as plaster and fibre cement board, should first be primed with PVA (diluted 1:6 with clean water) and allowed to dry thoroughly before GRIPFILL™ is applied. Building panels should be cut to shape beforehand.

<table>
<thead>
<tr>
<th>Description</th>
<th>Contents ml</th>
<th>Art No.:</th>
<th>Pack/Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartridge</td>
<td>350</td>
<td>01892 10 350</td>
<td>12</td>
</tr>
</tbody>
</table>
**SOLVENT-FREE.**

**Art. No. 890.600**
- Colour: Bright grey
- Contents: 290 ml
- Pack/Qty.: 1

- Bonding of silver mirrors according to DIN 1238. (We recommend for other mirrors examining, whether the mirror coating is attacked by the adhesive.)
- Bonding of plastic mirrors.
- Bonding of sheet glass.
- Odour-free and water proofed.
- Plastic.
- Ageing consistent.

**Converting**
- Surface: Wall or blankets have to be clean, dry and dust-free or free of grease.
- Remove lacquer layers or loose stucco.
- The mirror may not be stuck on a wet or damp surface.
- Junction: Assemble mirror after the application of the adhesive within 5 to 10 minutes, press on firmly.
- Fastening: Mirrors of 2 and 4 mm of strength can be stuck straight away to vertical walls only with the mirror adhesive.
- Apply the mirror adhesive in vertical stripes.
- Crawler strength between 6 to 8 mm. The distance between the stripes should be 10 cm.
- Big, vertical mirrors (strength from 6 to 8 mm) and mirrors on angular walls or blankets have to be fastened in addition mechanically.
- Fixing: Big mirrors should be fixed approx. 12 hours.
- Aeration: The back of the mirror has to be left aerated so that the adhesive can connect up.

**Areas of application**
- Mirrors on walls and doors.
- Mirror walls in shops, offices, restaurants and night clubs.
- On walls of sustainable on-wall and concrete.
- Wood, gypsum carton plates and flake boards.
- Styrofoam.

**Information**
- Consumption: Approx. 1 cartridge per m² at a crawler application strength of 6-8 mm.
- Removing only mechanically in cured condition.

**Technical data**

<table>
<thead>
<tr>
<th>Raw material base:</th>
<th>Polymeric rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific weight:</td>
<td>1.4 g/cm³</td>
</tr>
<tr>
<td>Open time:</td>
<td>Approx. 15 min. at 20°C / 50% of relative humidity</td>
</tr>
<tr>
<td>Full hardening:</td>
<td>1.5 mm/24 hours</td>
</tr>
<tr>
<td>Converting temperature:</td>
<td>+5°C to +30°C</td>
</tr>
<tr>
<td>Temperature stability:</td>
<td>+100°C</td>
</tr>
<tr>
<td>Volume change:</td>
<td>&lt; 5%</td>
</tr>
<tr>
<td>Shore-A-hardness:</td>
<td>Approx. 30</td>
</tr>
<tr>
<td>Tensile Strength:</td>
<td>0.8 N/mm²</td>
</tr>
<tr>
<td>Shelf life:</td>
<td>12 months at +5°C - +30°C</td>
</tr>
</tbody>
</table>
Art. No. 1890.600
Pack/Qty.: 1

Application

The Mirror Adhesive is a high viscosity paste, gun grade adhesive, which is suitable for bounding mirrors up to a thickness of 4mm on all building surfaces like concrete, wood, paintwork, metal, glass, ceramic tiles, etc.

Working methods

For bonding mirrors with thickness above 2mm, applicate the adhesive with a notched trowel on the wall as well as on the backside of the mirror. Press the mirror in the adhesive. For bonding mirrors with a thickness up to 2mm, applicate a ring of the adhesive with the contour of the mirror. The ring has to be about 3mm. Press well. Correction of a few millimetres max. are possible within 10 minutes by sliding.

Shelf life

At least 6 months (between +5°C and +25°C) in closed cartridges.
Fire Cement 1000 is suitable for use in heating equipment especially for sealing boilers, furnaces, stoves, chimneys, burner chamber linings, flue gas pipes and a very wide range of equipment and apparatus in the high temperature range up to 1000°C. Can also be used instead of sealing cord in the doors of boiler systems after annual service and/or cleaning.

**Application**
The sealing surfaces must be free from dust, grease, oil and loose rust and must be polished. Application temperature +5°C to +30°C. Drying time approx. 2 days. Sealant can only withstand heat when fully cured. Protect from persistent moisture.

### Specification

<table>
<thead>
<tr>
<th>Container</th>
<th>Contents ml</th>
<th>Art No.:</th>
<th>Pack/Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartridge</td>
<td>310</td>
<td>893 290 0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Raw material base:** Water glass cement with mineral fillers.

**Shelf life:** 9 months at max. +30°C in sealed cartridge. If the cartridge is opened and sealed again, it should be used within 8 weeks.

**Specific weight:** 221 g/cm³.

**Shrinkage:** Minimal.

**Expansion:** None present - the dried cement has practically no elasticity.

**Consistency:** Paste.

**Temperature resistance:** +5°C to 1000°C (constant).

**Processing temperature:** +5°C to 30°C.

**Colour:** Grey.

**Odour:** Neutral.

**Curing time:** Approx. 2 days - protect from moisture during this period (dries in air). Increasing the temperature gradually can reduce the drying time.

**Resistant to:** Greases, oils, domestic cleaning agents, flue gases and their condensations, difficult to dissolve in water.

**Processing instructions:** Base materials must be clean, dry and free from dust and grease.
Pyrocryl intumescent sealant.

White
Art. No. 892.317.299
Pack/Qty.: 1

Description
• Fire rated emulsion acrylic sealant that swells when subject to temperatures in excess of 125°C to block the passage of fire and smoke.
• Tested to BS 476 Part 20 and Part 22.
• Flexible, excellent adhesion to most building substrates.

Applications
• Sealing, filling and pointing to fire rated partitions.
• Sealing through gaps in firecheck walls.
• Sealing construction joints in fire rated structures where movement will not exceed + or -15%.
• Sealing around firecheck door frames.
Low modulus.

**Art. No. 892.317.999**

Pack/Qty.: 1  
Colour: White

**Description**

- Fire rated, neutral cure sealant that retails integrity up to 4 hours when exposed to extreme heat.
- Permanently flexible, offers movement accommodation of + or - 50% with excellent adhesion to all substrates.

**Application**

- Perimeter pointing to fire rated structures.
- Vapour seals in fire rated cladding.
- Pointing around curtain walling.
- Sealing infill panels and concrete joints fire rated walls and floors.

**Pyropol data**

- Movement Accommodation: + or - 50%
- Skinning Time: 4 to 8 hours
- Cure Time: 10 to 14 days
- Hardness Shore A: 15
- Temperature Resistance: 150°C
- Paintability: not recommended
- Application Temperature: +30°C to + 60°C
- Cleaning: Uncured sealant with white spirit or M.E.K.
- Shelf Life: 12 months
- Storage: +5°C to + 25°C

**Joint dimensions**

<table>
<thead>
<tr>
<th>Joint size</th>
<th>Applied brick to</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>32mm x 12mm</td>
<td>Using 12mm P.E Foam = 4 hour rating</td>
<td></td>
</tr>
<tr>
<td>20mm x 12mm</td>
<td>Using 12mm P.E Foam = 3 hour rating</td>
<td></td>
</tr>
<tr>
<td>20mm x 12mm</td>
<td>Using 25mm ceramic fibre = 4 hour rating</td>
<td></td>
</tr>
</tbody>
</table>

| Minimum joint width | 5mm        |
| Maximum joint width  | 50mm       |
| Minimum joint depth  | 5mm        |
| Maximum joint depth  | 12mm       |

**Joint ratios**

| Joint width | 5mm 10 15 20 30 |
| Joint depth  | 5mm 10 8 12 12  |

**Quantity estimator**

Number of cartridges required = \( \frac{\text{Lineal metres} \times \text{cross section of joint in sq mm}}{\text{pack volume}} \)

**Pyropol test compliance**

Pyropol has been tested to BS 476, Part 20 by the Loss Prevention Council, and Part 22 by Fulmer Yarsley. With the sealant applied to the exposed face of the furnace using Polyethylene Foam backer rod a single seal of Pyropol achieved a 3 hour rating.

Full copies of the test reports are available on request.
# Bond and Seal

## Applications/Requirements/Products

<table>
<thead>
<tr>
<th>Application Requirement</th>
<th>Quick final strength</th>
<th>Dynamic/mechanical high loads OK</th>
<th>Coatable, paintable, immediate with wait time</th>
<th>Coatable, paintable, Immediate with wait time (cer-tificate/NSF)</th>
<th>Food processing sector</th>
<th>UV and weather-resistant</th>
<th>Elastic with great elasticity</th>
<th>Elastic with great elasticity</th>
<th>Restoration of the original structure</th>
<th>Visible joints (e.g., connection joints)</th>
<th>Area adhesion</th>
<th>Seam adhesion/Point adhesion (e.g., sheet metal overlaps, angle profiles, truck side panels, armor, frame adhesions, sign and board mounting)</th>
<th>Adhesion of tuning parts (e.g., spoilers) Observe the manufacturer’s instructions!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seam sealing/Joints (e.g., overlapping seams, welds, sheet metal overlaps, weld seams, housing ends, expansion joints, gap seals)</td>
<td>B + S ALL IN 1</td>
<td>B + S ALL IN 1</td>
<td>B + S ALL IN 1</td>
<td>B + S ALL IN 1</td>
<td>B + S ALL IN 1</td>
<td>B + S ALL IN 1</td>
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<td>B + S ALL IN 1</td>
<td>B + S ALL IN 1</td>
<td>B + S ALL IN 1</td>
<td>B + S ALL IN 1</td>
</tr>
<tr>
<td>Area adhesion (e.g., bumper plates, bed plates, corrugated sheet metal and steps, carrier plates, corner and edge protection plates)</td>
<td>B + S POWER</td>
<td>B + S POWER</td>
<td>B + S POWER</td>
<td>B + S POWER</td>
<td>B + S POWER</td>
<td>B + S POWER</td>
<td>B + S POWER</td>
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<td>B + S POWER</td>
<td>B + S POWER</td>
<td>B + S POWER</td>
<td>B + S POWER</td>
<td>B + S POWER</td>
</tr>
</tbody>
</table>

**Note:**
First select the most important requirement for your application. Then locate the suitable product on the “Application” line.
Elastic PU adhesive and sealant for a broad range of uses.

► For universal use.

Your advantage:
- Outstanding adhesive strength on a wide range of materials and surfaces.

► Highly elastic.

Your advantages:
- Can be used for connecting same and different materials.
- Compensation of different material expansions.
- Dampens vibrations and noise.

► Long skin formation time.

Your advantages:
- Enables bolding and/or sealing of complicated and very large components.
- Joint parts can be repositioned.

► Can be ground and painted over.

Your advantage:
- Following skin formation, can be mechanically machined and painted over without surface activation (check paint compatibility beforehand with preliminary tests!).

► Legally approved for use with food (ISEGA certificate).

Your advantages:
- Harmless to humans in hardened state.
- Suitable for bonding and sealing food processing plants.

► Non-corrosive.

Your advantage:
Prevents metal corrosion.
Nearly odourless.

► Silicone-free.

Replacement Nozzle
Art No.: 0890 100 099
P.Qty. 12
## TECHNICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical basis</td>
<td>1-component polyurethane</td>
</tr>
<tr>
<td>Density (DIN 53479) (before hardening)</td>
<td>approx. 1.25 kg/l</td>
</tr>
<tr>
<td>Application temperature</td>
<td>+5°C to +35°C</td>
</tr>
<tr>
<td>Skin formation time*</td>
<td>45-60 min.</td>
</tr>
<tr>
<td>Hardening speed*</td>
<td>3 mm/24 h (moisture-hardening)</td>
</tr>
<tr>
<td>Volume change (DIN 52451)</td>
<td>approx. –5%</td>
</tr>
<tr>
<td>Shore A hardness (DIN 53505)</td>
<td>approx. 40</td>
</tr>
<tr>
<td>Tensile strength (DIN 53504)</td>
<td>1.8 N/mm²</td>
</tr>
<tr>
<td>Elongation at tear (DIN 53504)</td>
<td>approx. 500%</td>
</tr>
<tr>
<td>Resistance to further tearing (DIN 53515)</td>
<td>approx. 6 N/mm</td>
</tr>
<tr>
<td>Elongation, compression during use</td>
<td>10%</td>
</tr>
<tr>
<td>Volume resistivity (DIN 53482)</td>
<td>approx. $10^{10}$Ωcm</td>
</tr>
<tr>
<td>Glass transition temperature (DIN 53445)</td>
<td>approx. –45°C</td>
</tr>
<tr>
<td>Thermal stability</td>
<td>–40°C to +90°C Briefly 8 h at +120°C</td>
</tr>
<tr>
<td>Resistant to</td>
<td>Water, seawater and limy water, public waste water, weak acids and alkaline solutions. Briefly resistant to Fuels, mineral oils, vegetable and animal fats and oils.</td>
</tr>
<tr>
<td>Shelf life</td>
<td>12 months (+10°C to +25°C)</td>
</tr>
</tbody>
</table>

* measured at 23°C / 50 % rel. humidity

### Application:
The application surfaces must be clean, dry, dust and grease-free (see Bond+Seal surface optimization). Material not hardened can be removed with B+S Remover, Art. No. 0890 100 63, while hardened material can only be removed mechanically.

### Note:
Do not bring into contact with alkydresin paint systems. Not suitable for glass groove sealing in areas in which UV back reflection can occur. Direct exposure to sunlight can lead to slight surface yellowing. Not suitable for PE, PP, PTFE, silicone rubber, expanded polystyrene and softened plastics. Please remind to keep a minimum adhesive thickness of 3 mm for a secure bonding.
Fast-acting, brushable PU sealant.

► Highly adhesive, permanently elastic sealing compound.

Your advantages:
- Very good adhesion to bare, primed and painted sheet metals.
- Compensates for tolerances/bridges gaps.
- Permanent, reliable seals.

► High degree of stability.

Your advantages:
- Excellent smoothing properties.
- Can be applied with a spatula or brush.
- Can be textured with a brush or smoothing tool.

► Short skin formation time.

Your advantages:
- The sealant surface is non-adhesive after a short time.

► Can be painted over quickly.

Your advantages:
- Can be painted over quickly thanks to the short skin formation time (check paint compatibility via preliminary testing!).

► Approved for use with foodstuffs (ISEGA certificate).

Your advantages:
- Harmless to humans in hardened state.
- Suitable for sealing in food-processing plants.

► Non-corrosive.

Your advantages:
- Prevents metal corrosion.

► Nearly odorless.

► Silicone-free.

Areas of application:
For permanently elastic, highly adhesive sealing of overlapping seams, spot-welded seams, visible joints, sheet-metal connection joints and folded seams, both indoors and outdoors.

Use:
The application surfaces must be clean, dry and dust- and grease-free (see Bond+Seal surface optimization). Material not hardened can be removed with B+S Remover, Art. No. 0890100 63, while hardened material can only be removed mechanically.

Note:
Do not bring into contact with alkyd-resin paint systems. Not suitable for glass groove sealing in areas in which UV back reflection can occur. Direct exposure to sunlight can lead to slight surface yellowing. Not suitable for PE, PP, PTFE, silicone rubber, expanded polystyrene and soft-ened plastics. Please remind to keep a minimum adhesivethickness of 3 mm for a secure bonding.To achieve an optimal adhesion the use of Würth B+S Primer products is essential ! Attention should be paid to critical application surfaces like non-ferrous metals(copper) and galvanized materials.For smoothing you can use Würth Sealant Smoothing Agent.

Technical data:

<table>
<thead>
<tr>
<th>Color</th>
<th>Contents ml</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>white</td>
<td>300</td>
<td>0890 100 710</td>
<td>1/12/24</td>
</tr>
<tr>
<td>gray</td>
<td>300</td>
<td>0890 100 720</td>
<td>1/12/24</td>
</tr>
<tr>
<td>black</td>
<td>300</td>
<td>0890 100 730</td>
<td>1/12/24</td>
</tr>
</tbody>
</table>

Color Contents ml Art. No. P. Qty.
white 300 0890 100 710 1/12/24
grey 300 0890 100 720 1/12/24
black 300 0890 100 730 1/12/24

Chemical basis 1-component polyurethane
Application temperature +5°C to +35°C
Skin formation time* approx. 20 min.
Curing speed *3 mm/24 h (moisture-hardening)
Volume change (DIN 52451) –6%
Shore A hardness (DIN 53505) approx. 40
Thermal stability Briefly up to
-40°C to +90°C
8h at +120°C
Resistant to water, seawater and limy water, public waste water, weak acids and alkaline solutions.
Briefly resistant to fuels, mineral oils, vegetable and animal fats and oils.

*measured at 23°C/50% rel. humidity

This information is only a recommendation based on our experience. When working with the product, the B+S optimization table must be followed. Preliminary testing required. For further information see the technical information leaflet.
BOND & SEAL POWER

Heavy-duty, elastic hybrid construction adhesive.

► Excellent adhesive range.
**Your advantage:**
- Very good adhesion to almost all surfaces, e.g. metals, steel, stainless steel, galvanized steel, aluminum, plastics (e.g. ABS, FRP, hard PVC) or ceramic materials.

► Minimally elastic.

► High initial strength.
**Your advantage:**
- No complicated attachment of components.

► Suitable for painting over.
**Your advantage:**
- Can be painted over before and after skin formation with all conventional paint systems (except alkyd resin paints).

► UV-resistant.
**Your advantage:**
- Very highly suitable for visible joints.

► Non-corrosive.
**Your advantage:**
- Prevents metal corrosion.

► Nearly odorless.

► VOC- and solvent-free.

► Isocyanate-, PVC- and silicone-free.

► Safety product.
**Your advantages:**
- Especially user-friendly and safe handling.
- Improved workplace safety and health protection.

► NSF (P1)-registered (No.136996).
**Your advantages:**
- International approval for use in areas where food is processed or stored.
- Very broad range of applications.

Areas of application:
For dynamically loaded structural connections and seam and joint sealing in autobody, vehicle and caravan construction, railway car and container construction, metal and equipment construction, in air conditioning and ventilation duct construction, in the foodstuffs industry and many more.

Application:
The application surfaces must be clean, dry and dust and grease-free. Material not hardened can be removed with B+S Remover, Art. No.0890100 63. Hardened material can only be removed mechanically.

Note:
Do not bring into contact with synthetic-resin paint systems (alkydresin). Not suitable for PE, PP, PTFE, silicone rubber, polystyrene and softened plastics. Note that a minimum adhesive thickness of 3mm must be complied with to ensure secure adhesion. To achieve optimum adhesion results, the use of Würth B+S Primer products is essential! This is especially important with critical surfaces, such as non-ferrous metals (copper) and galvanized materials. Use Würth sealant smoothing agent for smoothing.

Technical data:

<table>
<thead>
<tr>
<th>Color</th>
<th>Contents ml</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>white</td>
<td>300</td>
<td>0893 235 1</td>
<td>1/12</td>
</tr>
<tr>
<td>gray</td>
<td>300</td>
<td>0893 235 2</td>
<td>1/12</td>
</tr>
<tr>
<td>black</td>
<td>300</td>
<td>0893 235 3</td>
<td>1/12</td>
</tr>
</tbody>
</table>

Chemical basis: 1-component polyurethane
Application temperature: +5°C to +35°C
Skin formation time*: approx. 40 min.
Curing speed: *3 mm/24 h (moisture-hardening)
Volume change (DIN 52451): <2%
Shore A hardness (DIN 53505): approx. 50
Thermal stability:
Briefly up to:
-40°C to +90°C
16h at +120°C/4 hrs. at +140°C
Resistant to:
fresh water and salt water, aqueous tenside solutions
Briefly resistant to:
fuels, mineral oils, vegetable and animal fats and oils

*measured at 23°C/50% rel. humidity

This information is only a recommendation based on our experience. When working with the product, the B+S optimization table must be followed. Preliminary testing required! For further information see the technical information leaflet.
**SEAL / FIX**

Sprayable sealant based on an MS polymer for recreating the original texture following accident repairs. Contains solvents.

Very broad adhesion range.
Adheres to many surfaces, even without a primer coat.

Great Shore A hardness.
The material is impervious to mechanical loads.

High tensile strength and elongation at tear.
The seam also withstands stronger movements/elongation.

UV-stable.
Excellent ageing behaviour, even when seams are not painted over.

Suitable for painting over.
Can be painted over “wet on wet” and up to five days after skin formation with any conventional painting system (except alkyd resin paints). After this period, another adhesion promoter (primer coat) must be applied for improved adhesion of the paint.

Isocyanate- and silicone-free.

---

**Areas of application:**
Seam sealing in case of part replacement in the engine compartment, boot, floor group, spring strut, wheel well etc.

**Use:**
The application surfaces must be clean, dry, dust and grease-free. Seal/Fix is applied with the pneumatic gun Comfix, Art. No. 0891 628 6. The desired textures and layer thicknesses are determined by the distance to the object/the air pressure.

**Note:**
Do not allow Seal/Fix to come into contact with fresh polyurethane materials (i.e. those that have not yet hardened).
If painting over with metallic paints, a blocking primer should definitely be applied. The best adhesion between the paint and the Seal/Fix is achieved when the material is painted over immediately following application.

---

**Technical data:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical basis</td>
<td>POP mixed polymer</td>
</tr>
<tr>
<td>Density</td>
<td>1.48 g/cm³</td>
</tr>
<tr>
<td>Application temperature</td>
<td>+5 °C to +30 °C</td>
</tr>
<tr>
<td>Skin formation time (DIN 50014)</td>
<td>25 min</td>
</tr>
<tr>
<td>Curing speed (DIN 50014)</td>
<td>approx. 3 mm/24 h</td>
</tr>
<tr>
<td>Shore A hardness (DIN 53505)</td>
<td>40</td>
</tr>
<tr>
<td>Temperature resistance</td>
<td>-40 °C to +80 °C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>+5 °C to +25 °C</td>
</tr>
</tbody>
</table>

*measured at 23°C/50% rel. humidity

---

**Areas of application:**
Seam sealing in case of part replacement in the engine compartment, boot, floor group, spring strut, wheel well etc.

**Use:**
The application surfaces must be clean, dry, dust and grease-free. Seal/Fix is applied with the pneumatic gun Comfix, Art. No. 0891 628 6. The desired textures and layer thicknesses are determined by the distance to the object/the air pressure.

---

**Color** | **Look** | **Contents ml** | **Art. No.** | **P. Qty.**
--- | --- | --- | --- | ---
Schwarz | | 310 | 0893 226 | 1/12
White  | | 310 | 0893 227 | 1/12
Gray   | | 310 | 0893 228 | 1/12

---

**Note:**
Do not allow Seal/Fix to come into contact with fresh polyurethane materials (i.e. those that have not yet hardened).
If painting over with metallic paints, a blocking primer should definitely be applied. The best adhesion between the paint and the Seal/Fix is achieved when the material is painted over immediately following application.

---

**Additional articles:**
Plastic nozzle for sprayable seam sealant, Art. No. 0891 628 612
2K MultiFill, Art. No. 0893 213 1

---

35 PU SEALER
One component moisture curing multi-purpose foam suitable for use in the construction industry.

Art. No: 892.152.1
Contents: 750 ml
Pack/Qty.: 1

- Resistant to extremes of temperature.
- Economical in use.
- Once cured, will not rot.
- Offers good insulating properties.
- Foam yield - approx. 40 litres.

A single component, polyurethane based, gun applied expanding foam with many uses in the building and construction industry i.e: gap filling around window frames, filling voids around steel work, etc. The foam offers excellent resistance to: age, heat, cold, most chemicals, rot and pests.

**Note:**
When cured the foam is **not** UV stable. When applying the foam surfaces must be dampened in order to enable the foam to curefully and obtain maximum adhesion.

### Technical Data

<table>
<thead>
<tr>
<th>Base:</th>
<th>Humidity-hardening polyurethane polymer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal working conditions:</td>
<td>15 to 25°C, 60% rel. Humidity, base material well moistened.</td>
</tr>
<tr>
<td>PU Content:</td>
<td>672 gms = 45 litres yield (RG 15), 50 litres when foamed.</td>
</tr>
<tr>
<td>Gross density:</td>
<td>Approx. 15 - 25 mg/m³</td>
</tr>
<tr>
<td>Cellular structure:</td>
<td>Medium-fine, predominantly closed.</td>
</tr>
<tr>
<td>Touch-dry*:</td>
<td>After 7 min.</td>
</tr>
<tr>
<td>Cutable*:</td>
<td>After 20 min.</td>
</tr>
<tr>
<td>Support removable:</td>
<td>After 120 min.</td>
</tr>
<tr>
<td>Workable:</td>
<td>At &gt;5°C.</td>
</tr>
<tr>
<td>Tensile strength DIN 53 455:</td>
<td>18 N/cm²</td>
</tr>
<tr>
<td>Rupture strain DIN 53 455:</td>
<td>30%</td>
</tr>
<tr>
<td>Shear strength DIN 53 422:</td>
<td>8 N/cm²</td>
</tr>
<tr>
<td>Compression strain at 10% compression deformation DIN 53 421:</td>
<td>5 N/cm²</td>
</tr>
<tr>
<td>Water absorption DIN 53 428:</td>
<td>0.3% by volume</td>
</tr>
<tr>
<td>Thermal conductivity:</td>
<td>0.04 W/mK</td>
</tr>
<tr>
<td>After foaming:</td>
<td>Approx. 150%</td>
</tr>
<tr>
<td>Temperature resistance:</td>
<td>From -40 to +90°C, for brief periods -40 to +130°C.</td>
</tr>
<tr>
<td>Resistant to:</td>
<td>Ageing, heat, cold, many chemicals, rotting and vermin.</td>
</tr>
<tr>
<td>UV resistant:</td>
<td>No.</td>
</tr>
<tr>
<td>Shelf life:</td>
<td>Up to 9 months at temperatures below +20°C.</td>
</tr>
</tbody>
</table>

* Under ideal working conditions.
BS 476 Part 20.

Art. No: 892.152.51
Contents: 750ml
Pack/Qty.: 1

- Tested as a fire seal in horizontal and vertical joints to BS 476 Part 20 for up to 4 hours.
- Enhanced performance can be achieved by over capping with intumescent sealant.
- Single component, easy to apply.
- Also meets Class B1 of DIN 4102 Part 1.

Technical Data

Warrington Fire Research testing of Würth Fire Rated Gun Grade Foam.

<table>
<thead>
<tr>
<th>Gap width (mm)</th>
<th>Seal depth (mm)</th>
<th>Orientation</th>
<th>Description</th>
<th>Integrity (mins)</th>
<th>Insulation (mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>220</td>
<td>vertical</td>
<td>PU foam/mineral fibre core</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>30</td>
<td>220</td>
<td>vertical</td>
<td>PU foam/mineral fibre core</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>15</td>
<td>220</td>
<td>vertical</td>
<td>PU foam</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>45</td>
<td>220</td>
<td>horizontal</td>
<td>PU foam/mineral fibre core</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>15</td>
<td>220</td>
<td>horizontal</td>
<td>PU foam</td>
<td>206</td>
<td>206</td>
</tr>
</tbody>
</table>

The floor construction comprised 250 mm thick aerated concrete. The wall construction comprised 220 mm thick autoclaved blockwork.

Estimating Requirements:

The table below gives an estimate of the linear metres each can should yield for a given joint size. The actual amount will depend on the ambient temperature and humidity conditions.

<table>
<thead>
<tr>
<th>depth mm</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>300</td>
<td>150</td>
<td>100</td>
<td>75</td>
<td>60</td>
</tr>
<tr>
<td>20</td>
<td>150</td>
<td>75</td>
<td>50</td>
<td>37</td>
<td>30</td>
</tr>
<tr>
<td>30</td>
<td>100</td>
<td>50</td>
<td>32</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>40</td>
<td>75</td>
<td>37</td>
<td>25</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>50</td>
<td>60</td>
<td>30</td>
<td>20</td>
<td>15</td>
<td>12</td>
</tr>
</tbody>
</table>

Colour: Pink

UV resistance: The cured foam is NOT resistant to UV light and should be capped/covered after application.

Biological resistance: Resistant to vermin, insects and attack by fungus.

Closed cell structure: >60%

Tack free time: 10-15 mins (at 23°C, 55% RH)

Cutable time: 30-45 mins (at 23°C, 55% RH). Once fully cured Fire Rated Gun Foam can only be removed mechanically, i.e. by scraping or cutting. Excess cured material may be trimmed using a sharp knife or sanded down. Uncured foam should be removed/cleaned using PU Cleaner Art. No. 892.160

Application temperature: +5°C to +25°C

Service temperature: -30°C to +90°C (Short period to 120°C)

Yield per can: A 750ml can will yield approx. 35 litres of foam. The actual amount will depend on the ambient temperature and humidity conditions. Dampen surfaces to which the foam is applied will assist curing and maximise the yield obtained.
150 ml
Art. No: 892.16
Pack/Qty: 1

- For removing fresh PU foam spills from clothing or other surfaces.

500 ml
Art. No: 892.160
Pack/Qty: 1

- For cleaning foam guns. Fits directly onto gun, to spray through.
- Additional spray nozzle to remove fresh foam spills from clothing or other surfaces

Attention:
Hardened PU foam can be removed using Foam Cleaner

Art. No: 8921.155.150.
**Features**

1. Valve spring: matched to the output pressure of Würth PU foam.
2. Valve ball: pure Teflon ball ensures long service life.
3. Teflon coated: Ensures the easy cleaning of residues from the gun body.
4. Triple Teflon seal: provides an excellent leak proof seal between gun housing and nozzle.
5. Teflon coated needle: fewer PU residues = longer service life.

**Note:**
Guns should be cleaned through after every can of foam using PU cleaner Art. No.892.160. Uncured foam should also be cleaned from the outside of the gun body.
**Fix & Fill Foam**

- Use for fastening wooden door frames, filling and sealing window sills etc., for insulating and filling-in wall gaps and other cavities.
- An assembly and filler foam containing an environmentally safe propellant mixture in accordance with the Montreal Protocol for the protection of the ozone layer.
- Basis is one-component polyurethane prepolymer curing on contact with moisture.

Contents: 750 ml
**Art. No:** 892.155.1
Pack/Qty.: 1

**Properties**
- The fresh foam adheres to all building materials with the exception of surfaces such as polyethylene, teflon, silicone, oils and greases, mould release agents and similar.
- It can be used at temperatures from +5°C approx. upwards to +25°C approx.
- The cured foam is semi-rigid and predominantly close celled.
- It is resistant to heat and cold (-40°C to +100°C) and to ageing, but not to UV rays.
- The 500 ml container gives a yield of approximately 22 litres, which is sufficient to fill approximately 5 door frames (depending on slot width).

**Preparation**
- The surfaces must be clean, firm, free of loose particles and free of dust, grease and mould release agents and similar.
- Immediately before applying the foam, the surface must be sprayed thoroughly with water needed for an even curing of the fresh foam. Atmospheric moisture alone is not sufficient.
- Expansion is helped by further moistening each layer of fresh foam during the application process.
- The ideal processing temperature of the can and surface is approx. +20°C.
- Screw the adaptor with the extension hose firmly onto the valve, up to the stop, but do not over-tighten.

**CAUTION:**
Take care not to operate the valve accidentally. Shake well, approximately 15-20 times before use.

**Application**
- The foam flow can be regulated accurately by applying different pressure or by tilting the adaptor with the valve pointing downward.
- Activate the valve lever carefully and regulate the foaming.
- The fresh foam will expand by approx. 100-150%.
- Over-filling a joint will result in a prolonged curing process and insufficient air or surface moisture may cause delayed expansion.

**Note:**
For further technical information please see next page.

**Please note:**
Remove fresh foam spills immediately with PU Cleaner or solvents such as acetone. Cured foam can only be removed mechanically.
### TECHNICAL DATA

Determined at +20°C 60% p.h. and on well pre-moistened surface,
1 K-PU Foam upside down can be BE-B3

<table>
<thead>
<tr>
<th>Content</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents 500 ml:</td>
<td>approx. 22 litres</td>
</tr>
<tr>
<td>Raw density (foamed into groove):</td>
<td>approx. 25 kg/m</td>
</tr>
<tr>
<td>Cellular foam:</td>
<td>medium-fine.</td>
</tr>
<tr>
<td>Tack free (depending upon pre-reaction inside can):</td>
<td>approx. 10 min.</td>
</tr>
<tr>
<td>Cuttable (20 mm bead):</td>
<td>approx. 24 min.</td>
</tr>
</tbody>
</table>

**Processing temperature (can & surface)**

- **Minimum:** approx. +5°C
- **Maximum:** approx. +25°C
- **Optimum:** +15°C to +22°C

**Tensile strength (DIN 53455):** 18 N/cm

**Elongation at tear (DIN 53455):** 30%

**Shear strength:** 8 N/cm

**Bending strength:** 20 N/cm

**Compressive strain at 10% stress (DIN 53 421):** 5 N/cm

**Water absorption (DIN 53428):** 0.3 vol%

**Thermal conductivity (DIN 52612):** 0.04 W/mK

**Expansion:** approx. 15%

**Temperature resistance of cured foam bead**

- **Long term:** +40°C to +100°C
- **Short term:** +40°C to +130°C

**Shelf life:** 9 months

Store unopened, cool and dry environment, storage at higher temperatures might reduce shelf life considerably. The right to change physical properties as the result of technical progress is reserved.

**Important:**

During application of products with environmentally safe propellant, take care not to apply near naked flames or any incandescent material. Take extra caution around electrical equipment.

Use ONLY in well ventilated areas - **NO SMOKING.**

Vapours gathering in insufficiently ventilated areas might cause flammable and noxious concentration.

The data shown can only represent a general guideline. Depending upon particular application circumstances and techniques beyond the control of the manufacturer, these guidelines cannot entitle to any claim. In any case we recommend sufficient pre-testing. A guarantee can only be given for high quality of our products.
Cleaning kit for easy removal of cured PU foam from various surfaces.

- Problem solver.
  **Your advantage**
  - With this special kit you can easily clean and remove contaminations of cured PU foam.

- Non-dripping cleaning compound.
  **Your advantage**
  - When applied to vertical surfaces, the cleaning compound does not drop off. Thus, the cleaner can be applied selectively and the cleaning result is improved.

- Wide range of applications.
  **Your advantage**
  - Due to the good compatibility of the cleaning compound, PU foam residue can be removed from various different surfaces, such as hard PVC, bright aluminium, glass and stone or ceramic materials.

**Scope of supply**

<table>
<thead>
<tr>
<th>Designation</th>
<th>Article Number</th>
<th>Pack/Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 can (150ml) foam cleaner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 bottle (250ml) PVC glass care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 wooden spatula</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 cleaning cloth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 instruction sheet</td>
<td>892.160.000</td>
<td>1</td>
</tr>
</tbody>
</table>

**Note:** The individual articles are **not** available separately!

**Storage**
The chemical products contained in the cleaning kit have a shelf life of 12 months when stored in a dry place (+5°C to +25°C). Refer to container markings.

**Application**

This information is only intended as a recommendation based on our own experience. The user should always perform his own preliminary testing.

**Note:**
Always perform a preliminary test with regard to the compatibility with the surface. Do not use on film-coated plastics, types of anodized aluminium and protective paint, as well as enamels, varnishes and similar surface protection. Stone and ceramic materials should have a sealed surface and not be porous or absorbent. Read the safety data sheet and instructions for use prior to application!

**Instructions for use**

Stir foam cleaner prior to use! As much as possible, carefully remove any foam residue mechanically. Apply the foam cleaner to the remainder, applying a full coverage. After a reaction time of 2 hours, scrape the PU foam residue off using a wooden spatula and applying light pressure. Finish cleaning the spot by rubbing with a moist cloth. If required, repeat the procedure. To improve the glossy finish of the surface afterwards, apply PVC Gloss Care. Make sure to read the enclosed instruction sheet!
PVA WOODGLUE

- Especially formulated for all wood bonding where a fast set, high bond strength and excellent water resistance are required.
- Suitable for use with virtually all woods, wood decoratives and high-pressure decorative laminates.
- Extended opening time.
- Modified mix provides higher performance with pine.
- Additive is only effective for 24 hours.
- One part modified polyvinyl alcohol stabilised vinyl acetate homopolymer emulsion, containing coalescing solvent.
- May be used with hot or cold presses.
- May be cured by radio frequency bonding.
- Conforms to the wear resistance requirements of DIN 68602 to Category B.
- Conforms to BS 4071 in respect of bond strength resistance to sustained load and freeze thaw stability.

<table>
<thead>
<tr>
<th>Contents</th>
<th>Art No.:</th>
<th>Pack/Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>500g</td>
<td>892.100.16</td>
<td></td>
</tr>
<tr>
<td>1 kilo</td>
<td>892.100.17</td>
<td></td>
</tr>
<tr>
<td>5 kilo</td>
<td>1892.100.13</td>
<td></td>
</tr>
<tr>
<td>12 kilo</td>
<td>892.100.14</td>
<td></td>
</tr>
<tr>
<td>25 kilo</td>
<td>892.100.15</td>
<td></td>
</tr>
<tr>
<td>45 gallons</td>
<td>999.250</td>
<td></td>
</tr>
<tr>
<td>Brush for wood glue</td>
<td>892.100.010</td>
<td></td>
</tr>
<tr>
<td>Empty glue bottle</td>
<td>892.100.0</td>
<td>1 Bottle/4 Nozzles</td>
</tr>
</tbody>
</table>

Typical properties

<table>
<thead>
<tr>
<th>Type:</th>
<th>Reactive PVA Emulsion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>White (clear when dry)</td>
</tr>
<tr>
<td>Viscosity: 9500 cps</td>
<td>6, 20 rpm</td>
</tr>
<tr>
<td>Ph:</td>
<td>4</td>
</tr>
<tr>
<td>Minimum film forming temperature: 2°C</td>
<td></td>
</tr>
<tr>
<td>Solids content: 4.7%</td>
<td></td>
</tr>
<tr>
<td>Specific gravity: 1.10</td>
<td></td>
</tr>
</tbody>
</table>

Application

Bonding conditions: The adhesive substrates and ambient temperature should ideally be at a minimum 20°C (68°F). The moisture content of wood materials should be uniform and not exceed 12%.

Spreading: The adhesive can be applied by serrated glue spreader roller or brush. Application is normally to one surface at a rate of 150 gm/m² (0.5 ozs / sq. ft). Maximum 30 minutes depending on materials to be bonded. Assembly times should be minimised at low wood moisture.

Pressing: Pressure must be applied whilst the adhesive is still wet and should be a minimum of 30 psi (2kg/cm²) depending on type of wood and structure.

Press times: Press times required, depend on adhesive coating and upon substrates.

Typical figures are

<table>
<thead>
<tr>
<th>Hot press</th>
<th>Cold press</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decorative laminate/plywood or chipboard</td>
<td>30°C - 8 mins</td>
</tr>
<tr>
<td>Packaging:</td>
<td>60°C - 5 mins</td>
</tr>
<tr>
<td>Do not allow to freeze. Storage life not more than 6 months is recommended.</td>
<td></td>
</tr>
</tbody>
</table>

Cleaning: Equipment should be cleaned with warm or cold water while the adhesive is still wet.

Note:
Contact with ferrous metals i.e. steel, or iron can cause the glue to turn blue or black. Avoid contact with steel clamps.
Universal glue, PVAc base, very fast setting.

Characteristics
- Very fast setting.
- Very short open time.
- Fulfils requirements group D1 and D2 in accordance to EN 204.

Areas of application
- Gluing of veneers.
- Gluing large areas of laminate.
- Gluing carcasses / gluing for assembly purposes.

<table>
<thead>
<tr>
<th>Description</th>
<th>Contents</th>
<th>Art No.:</th>
<th>Pack/Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottle</td>
<td>500g</td>
<td>892.100.12</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>25 kilo</td>
<td>892.100.13</td>
<td></td>
</tr>
</tbody>
</table>

Technical data
- Base: Polyvinyl acetate
- Colour: White, dries transparent.
- Density: Approximately 1.1 g/cm³
- Solid content: 54%
- pH value: Approx. 5
- Viscosity: 15,00 mPas
- Method of application: On one side
- Application devices: Brush, spatula, roller, spray bottle
- Quantity applied: 100 to 160 g/m²
- Open time: 3 to 10 minutes
- Contact pressure: 0.2 N/mm²
- Minimum pressure time:
  - At 20° C: 3 mins. / at 50° C: 2 mins. / at 70° C: 1 min.
- Processing temperature: Minimum 15°C
- Duration of storage: 1 year in closed original containers, protect from frost.
- Cleaning: Wash machinery and equipment with cold or warm water immediately after use.

Note:
Contact with ferrous metals i.e. steel or iron can cause the glue to turn blue or black. Avoid contact with steel clamps etc.
Moisture curing one component adhesive to D4 (EN204).

Areas of application

- Wooden door and window frame construction.
- Lamination of wood materials e.g. MDF.
- Furniture construction.
- Structural adhesion of garden furniture.
- Bonding of mineral building boards, ceramic materials and concrete.

Advantages

- One component.
- Reacts with moisture from the air and from materials to be bonded.
- Joint filling.
- Resistant to solvents once cured.
- Simple application.

Technical data

<table>
<thead>
<tr>
<th>Contents</th>
<th>Art No.:</th>
<th>Pack/Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1kg</td>
<td>892.100.170</td>
<td>1</td>
</tr>
</tbody>
</table>

Base: Isocyanate

Colour: Yellow / brown

Application quantity: 150 - 200 grams per M²

Open time: 15 mins. at 20°C

Clamping pressure: Min. 8 kg / M²

Clamping time: 5°C - 120 mins.

Full strength: 24 hours

Gap filling capacity: Approx. 0.5 mm

Cleaning: Uncured adhesive with 892.160 (PU Cleaner) cured adhesive can only be removed mechanically i.e. scraping.

Working temperature: Ideal 20°C (min. 5°C)

Moisture content of substrate: Max. 20%.

Storage temperature: Between 10°C and 20°C.

Shelf life: Approx. 9 months in closed airtight container.

Method of use

Surfaces must be clean, dry and free of dust and grease. It is advisable to wear protective gloves when using Polyurethane Glue as the glue reacts with moisture on the skin. Apply to one surface only at a rate of 150 - 200 grams per M². Over application will result in wastage as the glue expands during curing. Clamping forces and times are as per the technical data.
**Product Description**

EVERBUILD RESINTITE is concentrated powdered wood glue based on urea-formaldehyde resins. RESINTITE is easily mixed with water and once dry, forms a bond stronger than the wood itself. RESINTITE may be used for cabinet making, general joinery, veneering, boat building and shop fitting applications. RESINTITE may be used internally or externally and is water resistant to BS EN204 D3 (test methods BSEN205 1991) and also conforms to BS EN301 1992  A3 (test method BSEN 302-1 1992) ie suitable for load bearing applications.

**Benefits**

- Excellent rate of bond strength development.
- High degree of water resistance. D3 Classification - joints may be subject to short term water contact or exposure to high humidity.
- Interior/exterior use.
- Low timber-staining characteristics - will not stain.
- Suitable for load bearing applications – internally or externally.
- Makes 50% more than the pack contents once mixed with water
- Gap filling ability

**Areas For Use**

- As a water resistant/load bearing wood adhesive, internally and externally, specifically; cabinet making, general joinery, veneering, boat building and shop fitting

**Shelf Life**

- 12 months when stored as directed above.

**Storage**

- Store in dry conditions between 5 and 25°C in original unopened containers.

<table>
<thead>
<tr>
<th>Colour</th>
<th>Article No.:</th>
<th>Pack Size</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>98921 700 1</td>
<td>3Kg</td>
<td>1</td>
</tr>
<tr>
<td>White</td>
<td>98921 900 1</td>
<td>25Kg Bag</td>
<td>1</td>
</tr>
</tbody>
</table>

**Application**

- Wear gloves to avoid contact of powder or mixed glue with skin (dermatitis risk in sensitive persons). Avoid inhalation of dust.
- Mix with clean water prior to use. Mixing may be either by weight or volume, using the following ratios.
- By weight; (recommended method for accuracy); Mix 2 parts powder with 1 part cold water.
- By volume; Mix 3.5 measures of powder to 1 measure of water.
- For both methods, use the following mixing procedure.
  1. Put half the water into a non metallic bowl
  2. Add all the powder and stir until dissolved.
  3. Add the remaining water and stir until smooth.
- The mix is now ready to use and will remain usable for approximately 3 hours at 15 °C.
- Apply to one surface only using a stiff brush. Assemble and clamp (pin or screw) the joint whilst the glue is wet. Keep the joint under pressure until the glue is set (approx. 6 hours at 15 °C or longer at lower temperatures).
- Remove excess adhesive with a damp cloth before glue sets.

**Surface Preparation**

- All surfaces must be clean, dry and free from grease.
Polyurethane Glue may be used for bonding all types of timber, plastic foams and other insulating materials to a wide variety of both flexible and rigid facing materials in the manufacture of structural sandwich panels and insulating building boards and laminates.

**Pressing**

Once the adhesive has been applied and the panel assembled, sufficient even pressure must be applied to keep the components in intimate contact during the cure cycle. The actual pressure required depends on the nature of such adherents but is generally in the range of 4-10 psi (0.3-0.7 kg/sq.cm). Such pressures may be obtained by using a platen press, air-bag or vacuum press.
SMART TACK is an advanced spray bonding system that outperforms and outdates conventional contact adhesives providing significant performance and time saving application benefits. Based on new technology resins, SMART TACK is applied by spray providing very fine strands of “high solids” adhesive that forms a web type pattern on application. SMART TACK finds a multitude of uses in the Shopfitting, furniture manufacture, laminating, joinery and exhibition industries.

Smart tack bulk tank

Designed for large scale use primarily in a production line environment, BULK TANK delivers the adhesive via a flexible industrial grade hose and high volume applicator gun. With excellent rapid covering ability, the BULK TANK GUN is left attached to the hose and canister and simply locked off after use with the system ready to go for instant re-use.

The BULK TANK GUN and BULK TANK HOSE are sold as separate stock items. Both items, when used together, are fully interchangeable with most leading suppliers of similar systems. However, BULK TANK HOSE is compatible with BULK TANK GUN only.

Benefits

• Fast Tacking: - Surfaces can normally be “closed” after only 3-5 minutes
• Long Open Time: - Surfaces can also be left open for up to 2 hours.
• Immediate Handling: - High early bond strength allows item to be handled, cut drilled and planed within 5 minutes of closing.
• High temperature: - Unaffected by temperatures up to 90°C (194°F).
• Fast Application; - 15 times quicker than applying conventional contact adhesive by spreader.
• Cost effective: - Goes approximately three times further than applying conventional contact adhesive by spreader.
• Convenient; - No airline, electric or press. Easy to maintain, no mess.
• Safer: - Low odour, no CFC`s, self contained systems.
• Blue Colour: - Unique to SMART TACK range.

Limitations

Do not use in areas subject to continuous water immersion. Do not use on colour core laminates or on any translucent/opaque sheeting. Do not use on bitumen, asphalt, or cellulose painted surfaces. Do not spray directly onto polystyrene. Spray onto other surface. Do not use as a mirror adhesive as the product may attack the mirror backing. Use MIRROR MATE adhesive. Do not use in areas subject to intense lighting or sunlight where the surface temperature could exceed 90°C.

At low temperatures, care must be taken to ensure that the temperature of the adhesive and of both surfaces to be bonded is higher than the ambient temperature. Cold materials have a strong tendency to attract moisture present in surrounding air, which can have disastrous effects on the bond strength. Always allow adhesive to become touch dry on both surfaces. Premature bonding may cause solvent entrapment and blistering of laminates.

As the manufacturer cannot know all the uses its products may be put to, it is the users responsibility to determine suitability of use. If in doubt, contact Technical Services Department for advice.

Areas For Use

The adhesive gives a permanent bond on laminates, veneers, edge banding, vinyl’s, uPVC sheet and fabrics and may also be used for temporary/light duty bonding on carpets, fabrics, polystyrene/PU sheeting, posters etc.

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Description</th>
<th>Pack Size</th>
<th>Box Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>9893 100 017</td>
<td>Clear</td>
<td>17kg</td>
<td>1</td>
</tr>
<tr>
<td>9893 100 019</td>
<td>Blue</td>
<td>17kg</td>
<td>1</td>
</tr>
<tr>
<td>00891 602 001</td>
<td>Gun for Smart Tack</td>
<td>n/a</td>
<td>1</td>
</tr>
<tr>
<td>00891 602 012</td>
<td>Hose for Smart Tack</td>
<td>n/a</td>
<td>1</td>
</tr>
</tbody>
</table>
Surface Preparation
Surfaces to be bonded must be clean, dry and dust/grease free. When bonding plastic laminates/sheeting, it is recommended that substrates are conditioned for 48hrs before assembly at 20oC with a relative humidity of 45-55%. Air should be able to circulate freely around these components. ALWAYS READ SAFETY SECTION AND WEAR PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION BEFORE USE.

Application
Ensure hose is screwed into position on both gun and canister, taking care not to cross thread or damage the thread. Ensure lock on spray gun is engaged. Fully open the valve on the canister and direct the gun at the surface to be bonded.

Before applying, ensure the gun is correctly adjusted and test spray on a practice piece.
Adjust knob at rear of gun until an even fan of 5-9" of fine strands of adhesive is produced. If the adhesive is “wet” tighten knob until only fine strands appear.

Fitting hose and gun to new canister: Close valve on canister completely. Hold gun trigger open, pointing away from person, until all pressure is released. Disconnect the hose at the valve and re-connect to a new canister. Open valve and check fittings for leaks.

Permanent bonding (laminates etc) - Apply to both surfaces. Always apply to laminate first and spray one surface horizontally and one surface vertically. Hold the spray gun at 90° to, and at a distance of 12-14 inches from the substrate. Do not hold closer than 12 inches to avoid “wetting” the surface. Squeeze trigger and move gun parallel to the surface in a smooth motion paying particular attention to the edges. Apply an even coat ensuring 80-100% coverage. Avoid localized spraying as this will allow the adhesive to puddle which in turn can cause unevenness and can “show” through the laminate or cause blistering. One coat is normally sufficient per side for non porous substrates. A second coat is recommended on porous substrates. Allow the adhesive to tack up and protect from contamination (dust etc) whilst this happens. The adhesive is ready for bonding when the whole area is touch dry, i.e. does not transfer to the finger when touched.

SMART TACK BULK TANK is normally ready for bonding within 3-5 minutes at 20 °C/50% relative humidity and may be left open for up to 2 hours before bonding. Ensure there are no wet patches of adhesive before bonding. At low temperatures, care must be taken to ensure that the temperature of the adhesive and of both surfaces to be bonded is higher than the ambient temperature. Cold materials have a strong tendency to attract moisture present in surrounding air, which can have disastrous effects on the bond strength.

Temporary or light duty bonding (carpets, fabrics, polystyrene sheet etc) - Apply as above but to the substrate surface only. Never apply direct to polystyrene. Always apply to the “other” surface.

Coverage: 255-340m² per 17kg can.

Specific Data

<table>
<thead>
<tr>
<th>Specific Data</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>Synthetic rubber/resin</td>
</tr>
<tr>
<td>Solids</td>
<td>28 - 32%</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Low</td>
</tr>
<tr>
<td>Coverage</td>
<td>15-20m²</td>
</tr>
<tr>
<td>Tack Life</td>
<td>3 mins to 2 hours</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.90 - 0.99</td>
</tr>
</tbody>
</table>

Health & Safety
Consult MSDS for full list of hazards.

Storage
Store in original unopened containers between 5 and 25°C. Store as flammable liquid.

Shelf Life
Twelve months from date of manufacture in original unopened containers.

The technical data contained herein is based on our present knowledge and experience and we cannot be held liable for any errors, inaccuracies, omissions or editorial failings that result from technological changes or research between the date of issue of this document and the date the product is acquired. Before using the product, the user should carry out any necessary tests in order to ensure that the product is suitable for the intended application. Moreover, all users should contact the seller or the manufacturer of the product for additional technical information concerning its use if they think that the information in their possession needs to be clarified in any way, whether for normal use or a specific application of our product. Our guarantee applies within the context of the statutory regulations and provisions in force, current professional standards and in accordance with the stipulations set out in our general sales conditions. The information detailed in the present technical data sheet is given by way of indication and is not exhaustive. The same applies to any information provided verbally by telephone to any prospective or existing customer.
**SUPER FAST GLUE**

For the adhesion of metal, plastic, and rubber parts with and to each other.

- Patented special cap.

**Your advantages:**
- Problem-free, one-handed use.
- Precise dosing.
- The tips do not clog.

- Bonds in seconds.

**Your advantages:**
- Immediate further processing possible.
- Fast repairs.
- Simple designs without additional fastening materials possible.
- Increased temperature usually not necessary.

- Solvent-free.

**Attention:**
It is advisable to wear safety gloves and goggles.

<table>
<thead>
<tr>
<th>Content g</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 g</td>
<td>0893 090 0</td>
<td>1/25</td>
</tr>
<tr>
<td>20 g</td>
<td>0893 09</td>
<td>1</td>
</tr>
<tr>
<td>50 g</td>
<td>0893 090 1</td>
<td>1</td>
</tr>
</tbody>
</table>

**SUPER FAST GLUE**

Now, also in the innovative EASY PEN design.

- Even easier, more practical handling.
- Fits ergonomically in your hand.
- The base of Easy Pen provides stable, secure support.
- The lever permits easy, problem-free use without great force.
- High-precision work possible.

<table>
<thead>
<tr>
<th>Content g</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 g</td>
<td>0893 090 030</td>
<td>1/16</td>
</tr>
</tbody>
</table>
SKG – INSTANT ADHESIVE GEL

Cyanoacrylate adhesive gel

► Stable setting
Your advantage:
• Gel nature prevents running to the greatest degree.

► Fast setting
Your advantage:
• The adhesive hardens extremely quickly.

► For universal use
Your advantage:
• Adheres both smooth and absorbent surfaces.

► Clean workability
Your advantage:
• Quick and easy opening of the cap makes working easier.

Caution:
It is advisable to wear safety gloves and goggles.

Use:
The parts to be bonded must be clean, grease-free and dry. Apply a thin, even layer of adhesive to just one of the surfaces to be bonded. Produce the connection immediately with sufficient pressure to ensure complete contact. Maintain pressure during the time required for the fixation strength.

Application surfaces:
Metal, cork, felt, leather, rubber, porcelain, plastics (e.g. unplasticized PVC, ABS, polystyrene) with and among each another.

Application:
• Bonding profile rubber for wooden and plastic windows
• Sign attachments
• Adhering of rubber seals
• Repair of broken edges

Technical data:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis</td>
<td>Ethyl cyanoacrylate</td>
</tr>
<tr>
<td>Color</td>
<td>transparent</td>
</tr>
<tr>
<td>Hardening system</td>
<td>with humidity</td>
</tr>
<tr>
<td>Viscosity</td>
<td>gel, thixotropic</td>
</tr>
<tr>
<td>Density</td>
<td>1.08 g/cm³</td>
</tr>
<tr>
<td>Deal application temperature</td>
<td>+20°C</td>
</tr>
<tr>
<td>Temperature resistance</td>
<td>-30°C to +80°C</td>
</tr>
<tr>
<td>Softening point</td>
<td>+165°C</td>
</tr>
<tr>
<td>Setting speed</td>
<td>20 – 100 sec. (depending on material)</td>
</tr>
<tr>
<td>Final strength</td>
<td>after 24 hours</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>20 – 30 N/mm² according to DIN 53288</td>
</tr>
<tr>
<td>Tensile shear strength</td>
<td>25.5 N/mm² according to DIN 53283</td>
</tr>
<tr>
<td>Gluing gap size</td>
<td>ideal 0.05 mm, maximum 0.25 mm</td>
</tr>
<tr>
<td>Shelf life</td>
<td>12 months (cool and dry)</td>
</tr>
</tbody>
</table>

PRIMER
• Adhesion promoter for pre-treatment of PE, PP, PTFE and silicone rubber.
• Fast-acting.
Caution: For combination bonding with different materials, only the non-polar surface may be primed!

ACTIVATOR
• For accelerating the reaction of Würth cyano-acrylate adhesives.
• The activator can be used on all surfaces.

The activator is highly compatible with common plastics. However, when using for the first time, it should be tested in a non-visible location to determine whether the plastic is resistant to the activator as a precautionary measure.

<table>
<thead>
<tr>
<th>Content</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 ml</td>
<td>0893 091 0</td>
<td>1</td>
</tr>
<tr>
<td>150 ml</td>
<td>0893 301 20</td>
<td>1/4</td>
</tr>
</tbody>
</table>

Contents in ml | Art. No.   | P. Qty. |
---------------|------------|---------|
3 g            | 0893 403   | 1/40    |
20 g           | 0893 403 1 | 1/10    |

Polycarbonate Goggles
Art. No. 08991090

With this information we want to advise you to the best of our knowledge based on our tests and experience. However, we shall assume no liability for the application results of individual cases caused by large numbers of applications and the storage and application conditions which lie outside the scope of our influence. This also applies to the use of non-binding technical and commercial Customer Service we provide. We always recommend that you conduct your own tests. We guarantee the consistent quality of our products. We reserve the right to make technical changes and carry out further development.
**Benefits**

- Flash setting formulation - bonds most surfaces within 10 seconds, cutting down dramatically mitre assembly bonding times when compared to conventional wood adhesives.
- High viscosity adhesive – low soak in to give greater bond strength than conventional cyanoacrylates on porous surfaces (eg wood)
- Gap filling – high viscosity adhesive will fill small gaps in mitres etc (up to 0.2mm)
- Economical in use.

**Areas of Use**

- Multitude of industrial applications: Bonds MDF, wood, chipboard, rubber, plastics, Perspex, uPVC ceramics, aluminium and metals.
- Ideal for all cornice and profile mitres, trims, picture frames, MDF, skirting and architrave joints, worktop end strips, PVCu trims and much more. It is particularly useful for production lines such as electronics assembly and uPVC window trim bonding.

**Limitations**

- Ensure surfaces are degreased prior to bonding.
- Do not use on glass
- Do not use in applications involving constant water immersion.
- Do not use on bitumen or tar leaching products.
- Do not use on load bearing applications – Use EVERBUILD ALL PURPOSE WOOD ADHESIVE.
- On wooden/porous surfaces, do not use any other cyanoacrylate except MITRE FAST ADHESIVE. These products are thinner and the soak in will give poor bond strength.

**Shelf Life**

- Six to Twelve months from date of manufacture in original unopened containers, depending on temperature of storage.
- As low temperature as possible will give maximum shelf life.

**Application**

- Spray one surface with activator.
- Apply adhesive sparingly to other surface
- Bring together, position and hold for about 10 seconds.

**Storage**

- Store in original unopened containers between 4 and 25°C. Reseal immediately once used.
- Protect activator from sources of ignition

**Contents:**

- 50g  
- 200ml

**Art. No.:** 01893 212
A high tack medium viscosity one part neoprene contact adhesive.

- Long open time.
- Easy application.
- Low soak - to avoid glue line starvation.

**Uses**
This highly versatile adhesive will bond a large variety of materials including: plastic laminate, aluminium, sheet lead, hardboard, wood veneers etc. to a variety of core materials.

**Application**
- **Preparation:** For maximum bond integrity: Precondition adhesive and materials to be bonded at 15°C - 20°C. Surfaces should be free of grease and dust. Stir vigorously before use.
- **Spreading:** By hand or roller at 4.1² - 6.2² / litre to both surfaces to be bonded. Ensure total area is covered.
- **Drying time:** 10 - 15 minutes.
- **Open time:** Up to 5 hours. Drying time and open time are both dependant on adhesive coverage and ambient conditions. Adequate drying time must be allowed to avoid solvent entrapment.
- **Assembly:** Carefully align materials before contact. Press surfaces together at maximum pressure consistent with the materials being bonded. Use cold press, hand rollers, block and hammer etc. Maximum adhesive performance is dependant on sufficient pressure being applied.

<table>
<thead>
<tr>
<th>Description</th>
<th>Contents ltr</th>
<th>Art No.:</th>
<th>Pack/Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canister</td>
<td>5</td>
<td>8901.100.099</td>
<td>1</td>
</tr>
</tbody>
</table>
**SPRAY ADHESIVE**

![Image of spray adhesive]

**Fast-drying adhesive for all lightweight materials.**

- **Highly temperature-resistant.**
  **Your advantage:** Permanent firm hold for almost all applications.

- **Highly temperature-resistant.**
  **Your advantage:** Fast-drying.
  Thanks to fast hardening, working material can already be loaded and processed further after a short time.

- **Adjustable spraying nozzle.**
  **Your advantage:** Optimal for use in an extremely broad range of work situations.

- **Silicone-free.**

**Areas of application:**
Permanently and quickly bonds plastic, foam, cork, foils, metal, wood, paper and polystyrene with and to each other. Especially suitable in motor vehicle sector, implant workshops, in switch cabinet and ventilation system construction etc.

**Notes:**
Thin application of adhesive; saturate well on absorbent surfaces. Flash-off time depending on surface, material and temperature: 5–10 minutes. **Caution:** Not suitable for adhesive bonding of soft PVC and PVC films.

<table>
<thead>
<tr>
<th>Designation/Container</th>
<th>Contents ml</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol can</td>
<td>500</td>
<td>0890 100 055</td>
<td>12</td>
</tr>
</tbody>
</table>

**HIGH-ADHESION SPRAY ADHESIVE**

![Image of high-adhesion spray adhesive]

**Film-forming adhesive with high immediate adhesive bonding force for absorbent surfaces.**

**Areas of application:**
Permanently and quickly bonds plastic, metal and in special absorbent surfaces, e.g. felt, fabric, foam and woven fabric, with and to each other. The adhesive bonding properties are especially matched to the various applications in the motor vehicle sector.

**Notes:**
Shake well before using. The parts to be bonded must be dry and free of dust and grease. Following cleaning, thinly spray both gluing surfaces at a distance of approx. 20–25 cm; saturate well with absorbent surfaces. Allow to flash off for between 5–15 min (depending on temperature, material and application) and join.

**Caution:**
Not suitable for adhesive bonding of soft PVC, PVC films and Styrofoam.

<table>
<thead>
<tr>
<th>Designation/Container</th>
<th>Contents ml</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol can</td>
<td>500</td>
<td>0890 100 064</td>
<td>12</td>
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</tbody>
</table>

---

**Acetone Cleaner**
Art. No. 0893 460

**Precleaner**
Art. No. 0893 200 1

**Silicone Remover**
Art. No. 0893 222

**Art. No. 0893 222 5**

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We provide this information to advise you based on our tests and experience to the best of our knowledge. Preliminary testing required! For additional information, see Technical Data Sheet.
PROFILE RUBBER GLUE

- For adhesive bonding of rubber profiles on untreated, primed or painted metal.
- Temperature resistance up to approx. +100°C.

<table>
<thead>
<tr>
<th>Contents in ml</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>0890 100 015</td>
<td>12</td>
</tr>
</tbody>
</table>
"CLASSIC PLUS " WINDSCREEN ADHESIVE

Elastic 1-component windscreen adhesive with very good stability.

Normal-modulus
- Can be used for all common vehicle types in the car, utility vehicle, bus, transport vehicle and agricultural and construction machine sectors.

Suitable for antennas, non-conductive. Prevents contact corrosion.
- Suitable for use on aluminum, magnesium and hybrid vehicle bodies (e.g. Audi A8, Jaguar XJ etc.).

Tested safety
- Drive-away time confirmed via crash testing and TÜV certificate pursuant to FMVSS208/212!
- Meets requirements of original equipment manufacturers (motor vehicle manufacturers).

Areas of application:
Replacement glazing of cars, utility vehicles, buses, transport vehicles and agricultural and construction machines.

Use:
It is imperative that the Würth Active Cleaner and the Würth Varioprimer be used when preparing surfaces. The products are to be checked to ensure that they have not expired before they are used. Apply adhesive while guiding the gun vertically, starting from the center at the bottom of the windscreen. Do not place the vehicle on the lifting platform. Observe the information provided by the vehicle manufacturer in regard to bead geometry. The application and drive-away times must be observed.

Note:
It is imperative that the Würth Active Cleaner and the Würth Varioprimer be used when preparing surfaces. The products are to be checked to ensure that they have not expired before they are used. Apply adhesive while guiding the gun vertically, starting from the center at the bottom of the windscreen. Do not place the vehicle on the lifting platform. Observe the information provided by the vehicle manufacturer in regard to bead geometry. The application and drive-away times must be observed.

This information is only a recommendation based on our experience. Preliminary testing required! For further information see the technical information leaflet.
"ULTIMATE" WINDSCREEN ADHESIVE

Season-independent, high-modulus, non-conductive 1K windscreen adhesive.

- **Season-independent.**
  - **Your advantage:** 1hr. drive-away time with an airbag at an ambient temperature of -10°C to +35°C.

- **High-modulus.**
  - **Your advantage:** Vehicle-strengthening windscreen adhesive.

- **Suitable for antennas, non-conductive.**

- **Prevents contact corrosion.**
  - **Your advantage:** Suitable for use on aluminum, magnesium and hybrid vehicle bodies (e.g. Audi A8, Jaguar XJ etc.).

- **Tested safety.**
  - **Your advantage:** Drive-away time confirmed via crash testing and TÜV certificate pursuant to FMVSS212/212!
  - Meets requirements of original equipment manufacturers (motor-vehicle manufacturers)

**Areas of application:**
Replacement glazing of cars and small transport vehicles.

**Use:**
A clean environment is to be selected for application. Use of the product with the accompanying Würth system components is essential for properly performed and problem-free work. The work instructions accompanying the product are to be followed when carrying out work.

**Note:**
It is imperative that the Würth Active Cleaner and the Würth Varioprimer be used when preparing surfaces. The products are to be checked to ensure that they have not expired before they are used. Apply adhesive while guiding the gun vertically, starting from the center at the bottom of the windscreen. Do not place the vehicle on the lifting platform. Observe the information provided by the vehicle manufacturer in regard to bead geometry. The application and drive-away times must be observed.

**Basic information**

<table>
<thead>
<tr>
<th>Content</th>
<th>Art. No.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Chemical basis</td>
<td>1K polyurethane (moisture - hardening)</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>block</td>
<td></td>
</tr>
<tr>
<td>Application temperature</td>
<td>+5°C to +35°C</td>
<td></td>
</tr>
<tr>
<td>Processing time</td>
<td>15 min.*</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>+5°C to +25°C</td>
<td></td>
</tr>
<tr>
<td>Drive-away time w/o airbag</td>
<td>30 min.**</td>
<td></td>
</tr>
<tr>
<td>Drive-away time w/airbag</td>
<td>1hr.**</td>
<td></td>
</tr>
</tbody>
</table>

* measured at 23°C/50% rel. humidity.

** at an ambient temperature of -10°C to +35°C

**Designation**

- **Complete Set**
  - Art. No. 0890 023 800
  - P.Qty. 1

- **Cartridge**
  - 310 mL
  - Art. No. 0890 023 801
  - P.Qty. 1/12

- **Cartridge**
  - 150 mL
  - Art. No. 0890 023 811
  - P.Qty. 1/24

- **Professional Set**
  - Art. No. 0890 023 830
  - P.Qty. 1

- **Bag**
  - 400 mL
  - Art. No. 0890 023 831
  - P.Qty. 15

* Set = cartridge, Active Cleaner (double cloth), Varioprimer safe + easy (20 mL), priming brush, window application nozzle, repair instructions.

** Set = bag, Active Cleaner (double cloth), Varioprimer safe + easy (20 mL), priming brush, window application nozzle, repair instructions.

This information is only a recommendation based on our experience. Preliminary testing required! For further information see the technical information leaflet.
GLASS SEALANT - REMOVABLE

**Sealant for external sealing of vehicle windows.**

**Areas of application:**
Glass Sealant Removable is a black, spreadable sealant for sealing windshields, rear and side windows, and can also be used for comparable sealing applications.

**Application:**
Apply between glass and rubber profile and between rubber profile and body flange. Excess material can be dabbed off with the sealant itself or body sealing tape after a short flash-off time.

- Highly compatible with most materials
  - Your advantage: Does not attack chrome, paint or rubber
- Temperature-resistant from -20°C to +80°C
- Resistant to water and caustic solutions
- No embrittling
- Remains soft-elastic and slightly adhesive on the surface

<table>
<thead>
<tr>
<th>Description</th>
<th>Contents ml</th>
<th>Art No.:</th>
<th>Pack/Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Sealant</td>
<td>310ml</td>
<td>0890 100 043</td>
<td>1/12</td>
</tr>
</tbody>
</table>

SPECIAL ADHESIVE

**For easy gluing of glass and metal with and to each other.**

**Areas of application:**
Inside rear-view mirrors on vehicles, metal clamping bolts, hinges on hinged side windows etc.

**Application:**
1. Thoroughly clean surface to be bonded with acetone cleaner and dry. Then apply activator to base surface.
2. Apply adhesive to metal surface
3. Press metal surface onto glass surface for approx. 20 sec.
   - Adhesive bond can already be loaded 50% after 15–20 min

- Impact and vibration-resistant adhesive bonding.
  - Your advantage: Lasting permanent connection between glass and metal
- Outstanding resistance to chemicals.
  - Your advantage: Highly resistant to diluted acids and alkaline solutions, water and alcohol!

**Technical Data:**

<table>
<thead>
<tr>
<th>Colour after curing</th>
<th>Temperature resistance</th>
<th>Final Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent</td>
<td>-55°C to +120°C</td>
<td>After approx. 12hr*</td>
</tr>
</tbody>
</table>

* 23°C / 50% rel. humidity

<table>
<thead>
<tr>
<th>Description</th>
<th>Contents ml</th>
<th>Art No.:</th>
<th>Pack/Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Adhesive</td>
<td>Plastic bag 1g, activator ampoule 0.5ml</td>
<td>0893 40</td>
<td>1</td>
</tr>
</tbody>
</table>
ADHESIVE TRIM TAPE

1K windscreen adhesive for utility vehicles, buses and vehicles on rails.

► 600 mL bag contents.
**Your advantage:**
• Designed for adhering large windscreens.

► Normal-modulus.
**Your advantage:**
• Elastic, tolerance-compensating windscreen adhesive.

► Long processing time.
**Your advantage:**
• User-friendly application.

► Excellent stability.
**Your advantage:**
• Very easy to use on vertical adhesion surfaces, e.g. side windows.

► Smoothes easily.
**Your advantage:**
• Very highly suitable for visible joints.

► Environmentally-friendly: comes in a bag.
**Your advantage:**
• More product, less packaging space, reduces garbage.

**Areas of application:**
Replacement glazing of utility vehicles, omnibuses, transport vehicles, agricultural machines, construction machines and vehicles on rails.

**Use:**
A clean environment is to be selected for application. Use of the product with the accompanying Würth system components is essential for properly performed and problem-free work. The work instructions accompanying the product are to be followed when carrying out work.

**Note:**
It is imperative that the Würth Active Cleaner and the Würth Varioprimer be used when preparing surfaces. The products are to be checked to ensure that they have not expired before they are used. Apply adhesive while guiding the gun vertically, starting from the center at the bottom of the windscreens. Do not place the vehicle on the lifting platform. Observe the information provided by the vehicle manufacturer in regard to bead geometry. The application and drive-away times must be observed.

This information is only a recommendation based on our experience. Preliminary testing required! For further information see the technical information leaflet.

<table>
<thead>
<tr>
<th>Article</th>
<th>Contents</th>
<th>Art. No.</th>
<th>P.Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bag</td>
<td>600 mL</td>
<td>0890 023 600</td>
<td>12</td>
</tr>
</tbody>
</table>

* measured at 23°C/50% rel. humidity.

**Basic information**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Ultimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical basis</td>
<td>1K polyurethane (moisture - hardening)</td>
</tr>
<tr>
<td>Color</td>
<td>black</td>
</tr>
<tr>
<td>Application temperature</td>
<td>+10°C to +40°C</td>
</tr>
<tr>
<td>Processing time</td>
<td>max 15 min.*</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>+5°C to +25°C</td>
</tr>
<tr>
<td>Drive-away time w/o airbag</td>
<td>3 hr.*</td>
</tr>
<tr>
<td>Drive-away time w/airbag</td>
<td>16 hr.*</td>
</tr>
</tbody>
</table>

* measured at 23°C/50% rel. humidity.

**Active Cleaner, 500 mL**
Art. No. 0890 0241

**Varioprimer, bottle, 100 mL**
Art. No. 0890 024101
**EPOXY RESIN FAST-ACTING ADHESIVE ESK-48**

**Solvent-free two-component adhesive.**

- **Fast curing.**  
  **Your advantage:**  
  - The reaction of the two components results in a fast setting speed. And that ensures fast application.

- **Broad range of applications.**  
  **Your advantage:**  
  - For bonding metals, many plastics, glass, ceramic etc. to each other.

- **High tensile strength values.**  
  **Your advantage:**  
  - Tensile shear strengths are retained even under influence of heat.

- **Outstanding resistance to chemicals.**  
  **Your advantage:**  
  - Resistant to many liquids, such as petrol, many lubricating oils and ethyl acetate.

**Other advantages**
- Can be sanded when fully hardened.
- Viscoelastic.
- High transparency.

**Adhesive ESK-48**

<table>
<thead>
<tr>
<th>Designation/Container</th>
<th>Cont. in ml</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double cartridge</td>
<td>48</td>
<td>0893 480</td>
<td>3</td>
</tr>
</tbody>
</table>

**Positive Mixer for ESK-48**

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0891 481</td>
<td>3</td>
</tr>
</tbody>
</table>

**Gun for ESK-48**

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0891893 485</td>
<td>1</td>
</tr>
</tbody>
</table>

**Acetone Cleaner**

<table>
<thead>
<tr>
<th>Contents in ml</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>0893 460</td>
<td>1</td>
</tr>
</tbody>
</table>

**Technical data:**

- **Basis**: Epoxy resin
- **Colour**: Clear, transparent
- **Density**
  - Binder: 1.14 g/cm³
  - Hardener: 1.15 g/cm³
- **Viscosity**
  - Binder: 20–60 Pa·s
  - Hardener: 25–65 Pa·s
- **Processing time**: 4 min at +23°C
- **Final strength**: 1 hr
- **Tensile shear strength**: 7 N/mm² at +23°C
- **Ideal application temperature**: +23°C
- **Thermal stability**: -60°C to +80°C
- **Handling strength**: After approx. 5 min
- **Shelf life**: 12 month sat +15°C to +20°C

**Notes on application:**
The static mixing tube is attached to the double cartridge of the ESK-48 and the cartridge is laid in the gun. The bonded joint must be uniformly pressed until final strength is achieved. The best adhesive bonding strengths are achieved after cleaning and lightly sanding with a maximum bonding gap of 0.1 mm. The curing time is dependent on the temperature. Adhesive not completely cured can be removed with Acetone Cleaner, Art. No. 0893460. The reaction can be accelerated by applying heat of +80°C. If work is interrupted for longer than 3 minutes, change the positive mixer.

**Application:**
- Adhesive bonding of stainless-steel sheets to each other, repairs of broken-off plastic and metal parts, manufacturing of PCBs etc.

**Hardening speed for tensile shear strengths of >10N/mm²:**

<table>
<thead>
<tr>
<th>Temperature in °C</th>
<th>Hardening time in min</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>approx. 120</td>
</tr>
<tr>
<td>15</td>
<td>approx. 70</td>
</tr>
<tr>
<td>23</td>
<td>approx. 60</td>
</tr>
<tr>
<td>40</td>
<td>approx. 25</td>
</tr>
<tr>
<td>60</td>
<td>approx. 10</td>
</tr>
<tr>
<td>100</td>
<td>approx. 2</td>
</tr>
</tbody>
</table>

**With this information we want to advise you to the best of our knowledge based on our tests and experience. However, we shall assume no liability for the application results in individual cases due to the large number of applications and the storage and application conditions which lie outside the scope of our influence. This also applies to the use of the non-binding technical and commercial Customer Service we provide. We always recommend that you conduct your own tests. We guarantee the consistent quality of our products. We reserve the right to make technical changes and carry out further development.**
High-strength two-component epoxy resin system for repairs to motor-vehicle bodies

► High-strength epoxy resin adhesive.

**Your advantages:**
- The repair restores the original strength and stiffness.
- Fewer spot welds.
- Meets the requirements of motor vehicle manufacturers.

► Glass-particle technology

**Your advantage:**
- Even if strong pressure is exerted, an adhesive thickness of 0.7 to 1.2 mm remains.

► Excellent stability.

**Your advantage:**
- The adhesive will not run on vertical surfaces (thixotropic).

► Excellent corrosion protection.

**Your advantages:**
- The original rust resistance is maintained.
- Corrosion is prevented at welds.

► Can be through-welded

► Can be ground and painted over

► Free of silicone

**Note:**
Not suited for load-bearing vehicle body parts (e.g. A-pillar, frame side bar). If body parts are only partially replaced, do not glue on visible surfaces since shadow seams may appear. Observe the vehicle manufacturer’s repair instructions.
REPLAST EASY

Complete system for easy and professional repairs of plastic parts.

- An adhesive for almost all types of plastic.*
  
  **The advantages for you:**
  - No complex treatments of different types of adhesives.
  - Usable for repairs and structural bonding.

- Special positive mixer
  
  **The advantages for you:**
  - Optimal mixing for small volumes.
  - Low loss of adhesive (waste).

- Cures quickly.
  
  **The advantage for you:**
  - Further processing, e.g. grinding, possible after minimum period of time.

- Superb chemical resistance.
  
  **The advantage for you:**
  - Resistant to many liquids such as petrol, many lubricants as well as ethyl acetate.

- Solvent-free adhesive.

---

### Description

<table>
<thead>
<tr>
<th>Contents</th>
<th>Art. No.</th>
<th>Pack Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replast adhesive set</td>
<td>0893 500 0</td>
<td>1</td>
</tr>
<tr>
<td>Plastic cleaner</td>
<td>0893 500 1</td>
<td>1</td>
</tr>
<tr>
<td>Plastic primer</td>
<td>0893 500 2</td>
<td>1</td>
</tr>
<tr>
<td>Fast 2C-plastic adhesive</td>
<td>0893 500 3</td>
<td>1</td>
</tr>
<tr>
<td>Universal 2C-plastic adhesive</td>
<td>0893 500 4</td>
<td>1</td>
</tr>
<tr>
<td>Superfast 2C-plastic adhesive</td>
<td>0893 500 5</td>
<td>1</td>
</tr>
<tr>
<td>Reinforcement tape</td>
<td>0893 500 6</td>
<td>1</td>
</tr>
<tr>
<td>Contour film</td>
<td>0893 500 7</td>
<td>1</td>
</tr>
<tr>
<td>Positive mixer</td>
<td>0891 486</td>
<td>25</td>
</tr>
<tr>
<td>Application gun</td>
<td>0891 893 485</td>
<td>1</td>
</tr>
</tbody>
</table>

*Set = 1 plastic cleaner, 1 plastic primer, 2 Fast 2C-plastic adhesive, 4 Universal 2C-plastic adhesive, 1 reinforcement tape, 1 contour film, 25 positive mixer, 1 application gun.

---

### Areas of application:

- **Passenger vehicles:** Spoilers, radiator grill, panelling clips, bumpers, brackets on headlamps and radiator, etc.
- **HGVs and buses:** Skirts, bumpers, air intake duct, wheel arches, etc.
- **Motorbikes:** All panelling.

### Transparent plastic adhesive

<table>
<thead>
<tr>
<th>Contents</th>
<th>Art. No.</th>
<th>Pack Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 ml</td>
<td>0893 500 8</td>
<td>1</td>
</tr>
</tbody>
</table>

For colourless bonding of transparent or coloured plastic parts. Application time 3 min.
Suitable for polycarbonate (PC) and Plexiglas (PMMA).

---

### Technical data:

<table>
<thead>
<tr>
<th></th>
<th>2C-plastic adhesive Universal</th>
<th>2C-plastic adhesive Fast</th>
<th>2C-plastic adhesive Superfast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application time</td>
<td>3.5 min</td>
<td>1.5 min</td>
<td>25 sec</td>
</tr>
<tr>
<td>Can be sanded at 23 °C after</td>
<td>30 min</td>
<td>10 min</td>
<td>5 min</td>
</tr>
<tr>
<td>Shore hardness D</td>
<td>79</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>Colour</td>
<td>black</td>
<td>black</td>
<td>black</td>
</tr>
</tbody>
</table>

This information should only be seen as containing recommendations based on our experience. A preliminary test must be carried out!

---

! **Note**
Due in part to the coatings and release agents used when manufacturing plastics, in isolated cases there may be adhesion problems.
Not suitable for the plastics PE (polyethylene) and PP (polypropylene) and PTFE (polytetrafluoroethylene). If necessary, check material compatibility in an inconspicuous place.

---

Use this vehicle Superpad
Art. No. 0581 028...
**THICK PRIMER FILLER**

- Corrosion protection with excellent filling and covering power for metallic surfaces.
- Very good adhesion properties. Adheres to aluminum, sheet steel, old paint etc.
- Long-lasting corrosion protection.
- Quick drying.
- Very good stretching and run off behavior.
- Heat-resistant up to 110°C.
- Very easy to sand.

**Features:**
Flexible thick primer filler with short drying time, corrosion protection and very good adhesion properties, also in conjunction with PU and MS polymer sealing compounds. For professional repair of small uneven areas, scratches and traces of sanding.

**Areas of application:**
Spot repair, accident repairs, vehicle body repair, paint work.

**Application:**
The application surface must be clean, dry and grease-free. Lightly sand problematic application surfaces. Shake can well before using. Apply the first spray coating thinly. Comply with flash-off time. Can be painted over after about 15 minutes with all conventional one-component, two-component and water-based top-coat paint systems.

**Notes:**
Can be used on galvanized and hot-dip galvanized surfaces after pretreatment with Zinc Cleaner Art. No. 0893 460 under certain conditions. Turn can upside down and spray until valve is empty after use.

---

**Colour** | **Contents in mL** | **Art. No.** | **P. Qty**
--- | --- | --- | ---
Gray | 400 | 0893 212 1 | 1/6

**Additional article**
- Two-Component HS Top-Coat Paint
  - Art. No. 5866 ... ...
  - P. Qty. 1
  - Silicone Remover Spray, 600 mL
  - Art. No. 0893 222 600
  - P. Qty. 6

---

*Volatile Organic Compound*
ADHESIVE REMOVAL SPRAY

Easily removes hardened melt adhesive from the painted surface.

Use a plastic wedge to gently lift the melt adhesive in one place. Spray the adhesive remover precisely into the gap of the hardened melt adhesive and allow it to take effect for a short time. The plastic remover creeps into cavities and detaches the adhesive residues from the surface.

The adhesive residue is removed in seconds from the surface in one piece. This eliminates the time-consuming removal procedure using a hairdryer, spatula and cleaning agent.

Note:
Check rubber and plastics for material compatibility.

Areas of use:
Special product for removing adhesives from the inside and outside of vehicles, caravans, mobile homes. For technical and leisure use.

<table>
<thead>
<tr>
<th>Contents in mL</th>
<th>Art. No.</th>
<th>P. Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>0893 141</td>
<td>1</td>
</tr>
</tbody>
</table>
DOS SYSTEM

Revolutionary one-handed dosing system

► Well-laid-out and orderly storage through the use of storage rack.
Your advantage:
• No time-consuming searching. Quick overview of available materials.

► Storage rack makes overhead bottle storage possible.
Your advantage:
• Medium is always available for use right away without shaking or squeezing.

► Room for 14 bottles.
Your advantage:
• Especially common products can be stocked in duplicate.

► Practical one-handed use thanks to the clever turn lock.
Your advantage:
• You’ll always have a free hand!

► Dosing head with self-cleaning closure system.
Your advantage:
• No residual material in dosing spout!

► Continuously adjustable dosing system.
Your advantage:
• Application-tailored consumption-and-cost-minimized dosing!

► Bellows-type bottle for high-viscosity materials.
Your advantage:
• Cost optimization through almost complete emptying of container contents!

► Silicone-free.
Your advantage:
• Can be used without hesitation in the automotive industry!

Wall mount

<table>
<thead>
<tr>
<th>Art No.</th>
<th>Description</th>
<th>P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0891 273</td>
<td>Retainer for DOS system, three compartm.</td>
<td></td>
</tr>
<tr>
<td>0891 271</td>
<td>Retainer for DOS system, seven compartm.</td>
<td>1</td>
</tr>
<tr>
<td>0891 273 14</td>
<td>Retainer for DOS system, 14 compartm.</td>
<td></td>
</tr>
</tbody>
</table>
HYDRAULIC SEAL

Used to seal pneumatic and hydraulic screw connections under high loads. Up to the burst pressure of the pipe/hose with screw connections.

► Can also be used on lightly-oiled surfaces.
Your advantage:
• You do not need to waste time removing grease from fittings.

► Excellent resistance to all hydraulic fluids and fuels.
Your advantage:
• Very safe, as damage caused by disintegration is prevented.

► Quick hardening, even at low temperatures: touchable in 40 minutes, usable after 2 to 3 hours.
Your advantage:
• Shorter vehicle downtimes.

Physical properties (when liquid)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical characterization</td>
<td>methacrylic ester</td>
</tr>
<tr>
<td>Color</td>
<td>violet</td>
</tr>
<tr>
<td>Viscosity 25°C Brookfield (RVT)</td>
<td>1,500 – 2,000 mPas (spindle r.p.m.: 5/2,5)</td>
</tr>
<tr>
<td>Density</td>
<td>1.20 g/cm³</td>
</tr>
<tr>
<td>Max. thread diameter</td>
<td>R 3/4&quot;</td>
</tr>
<tr>
<td>Max. gap filling capacity</td>
<td>0.15 mm</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100 °C</td>
</tr>
<tr>
<td>Shelf life</td>
<td>1 year at room temperature</td>
</tr>
</tbody>
</table>

Physical properties (when hardened)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting to the touch after</td>
<td>30 – 40 minutes</td>
</tr>
<tr>
<td>Usable after</td>
<td>2 – 3 hours</td>
</tr>
<tr>
<td>Final setting after</td>
<td>12 – 24 hours</td>
</tr>
<tr>
<td>Break-loose torque</td>
<td>2 – 3 Nm (M10)</td>
</tr>
<tr>
<td>Just-move torque</td>
<td>1 – 2 Nm (M10)</td>
</tr>
<tr>
<td>Compression/shear strength</td>
<td>1 – 3 N/mm²</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-55°C to +150°C</td>
</tr>
</tbody>
</table>

Contents | Art. No.   | P.Qty. |
---------|------------|--------|
50 g     | 0893 545 050 | 1      |
250 g    | 0893 545 250 |        |
**Repack for solid engine seals on pressure chambers as well as screw connections.**

- High temperature resistance.
  **Your advantage:**
  - Seals reliably up to temperatures of +280°C.

- Pressure resistant up to 700 bar.
  **Your advantage:**
  - Also suitable for high pressure lines and pressure chambers.

- Excellent adhesion.
  **Your advantage:**
  - Seals glass, ceramic and metal surfaces permanently and securely.

**Resistance List**
The engine sealing compound MOTORSEALANT has good resistance to the following media:

- Engine oil, transmission oil, hydraulic oil (mineral, synthetic), diesel fuel, heating oil, coolant, brake fluid, waste water, alkaline lye, formic acid, alcohols (methyl, ethyl, etc.), ethyl acetate, acetone, chlorinated solvents, phosphoric acid (10%).
- Gases: acetylene, carbon dioxide, propane, sulfur dioxide, hydrogen.

Due to space limitations this list is incomplete and restricted to the most important media. A complete list is available upon request.

**Note:**
The above information is intended as a recommendation only, based on our experience. As a matter of principle, we recommend that you carry out your own tests.

**Usage Notes:**
The product is thermosetting. From approx. +60°C it hardens into a self-contained seal. Apply a very thin coat of product to one side of a clean and dry surface and let aerate approx. 20 minutes before joining the two pieces. In case of later repair, the surfaces can be separated relatively easy.

**Caution:**
Not suitable as cylinder head gasket

<table>
<thead>
<tr>
<th>Components</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>Resin</td>
</tr>
<tr>
<td>Specific weight at +20°C</td>
<td>1.08</td>
</tr>
<tr>
<td>Film formation, potlife</td>
<td>5–7 minutes</td>
</tr>
<tr>
<td>Thermal behavior</td>
<td>−50°C to +280°C</td>
</tr>
<tr>
<td>Pressure tested up to</td>
<td>approx. 690 bar</td>
</tr>
<tr>
<td>Viscosity in mPas</td>
<td>approx. 5,000–13,200</td>
</tr>
<tr>
<td>pH value</td>
<td>approx. 7</td>
</tr>
<tr>
<td>Shelf life</td>
<td>1 year</td>
</tr>
<tr>
<td>Total deformation</td>
<td>25%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contents</th>
<th>Art. No.</th>
<th>P.Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 g</td>
<td>0893 260 100</td>
<td>1</td>
</tr>
</tbody>
</table>
FLANGE SEALANT, ORANGE

For sealing of flanges and surfaces with a gap of 0.5 mm max. Replacement for solid seals.

► Large gap filling capability.
Your advantage:
- Completely fills rough surfaces.

<table>
<thead>
<tr>
<th>Contents</th>
<th>Art. No.</th>
<th>P.Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 g</td>
<td>0893 574 050</td>
<td>1</td>
</tr>
<tr>
<td>250 g</td>
<td>0893 574 250</td>
<td>1</td>
</tr>
</tbody>
</table>

Physical Properties (in liquid state)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical description</td>
<td>Dimethylacrylate</td>
</tr>
<tr>
<td>Color</td>
<td>Orange</td>
</tr>
<tr>
<td>Viscosity 25 °C Brookfield (RVT/RVT/HB)</td>
<td>80,000–120,000 mPas (spindle rpm: 6/2.5) / 30,000–40,000 mPas (spindle rpm: 6/20)</td>
</tr>
<tr>
<td>Density</td>
<td>1.05 g/cm³</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100 °C</td>
</tr>
<tr>
<td>Shelf life</td>
<td>1 year at room temperature</td>
</tr>
</tbody>
</table>

Physical Properties (in cured state)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand-tight after</td>
<td>10–20 minutes</td>
</tr>
<tr>
<td>Usable after</td>
<td>3–6 hours</td>
</tr>
<tr>
<td>Final strength after</td>
<td>6–24 hours</td>
</tr>
<tr>
<td>Initial breakaway torque</td>
<td>17–22 Nm (M10)</td>
</tr>
<tr>
<td>Continuing torque</td>
<td>13–17 Nm (M10)</td>
</tr>
<tr>
<td>Pressure shearing strength</td>
<td>5–10 N/mm² (DIN 54452)</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>8–10 N/mm² (ASTM-D-2095)</td>
</tr>
<tr>
<td>Impact shearing strength</td>
<td>5–10 N/mm²/mm² (ASTM-D-950)</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>–55°C to +150°C</td>
</tr>
</tbody>
</table>

THREAD LOCK & PIPE SEALANT
FLANGE SEALANT, GREEN

For sealing of flanges and surfaces with a small gap of 0.3 mm max. Replacement for solid-seals. Particularly well suited for applications requiring good wetting, such as complicated castings, narrow webs and smooth surfaces.

► Low strength.
Your advantage:
• Easy disassembly.

Physical Properties (in liquid state)

<table>
<thead>
<tr>
<th>Chemical description</th>
<th>Dimethylacrylate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Green</td>
</tr>
<tr>
<td>Viscosity 25 °C Brookfield [RVT/RVT/HB]</td>
<td>40,000–60,000 mPas (spindle rpm: 6/2.5) 15,000–25,000 mPas (spindle rpm: 6/20)</td>
</tr>
<tr>
<td>Density</td>
<td>1.05 g/cm³</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100 °C</td>
</tr>
<tr>
<td>Shelf life</td>
<td>1 year at room temperature</td>
</tr>
</tbody>
</table>

Physical Properties (in cured state)

<table>
<thead>
<tr>
<th>Hand-tight after</th>
<th>1.5–30 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable after</td>
<td>3–6 hours</td>
</tr>
<tr>
<td>Final strength after</td>
<td>6–24 hours</td>
</tr>
<tr>
<td>Initial breakaway torque</td>
<td>8–10 Nm [M10]</td>
</tr>
<tr>
<td>Continuing torque</td>
<td>3–5 Nm [M10]</td>
</tr>
<tr>
<td>Pressure shearing strength [DIN 54452]</td>
<td>4–6 N/mm²</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>2–4 Nmm² [ASTM-D-2095]</td>
</tr>
<tr>
<td>Impact shearing strength</td>
<td>2–4 Nmm/mm² [ASTM-D-950]</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>–55°C to +150°C</td>
</tr>
</tbody>
</table>

Contents Art. No. P Qty.
50 g 0893 573 050 1
250 g 0893 573 250
HIGH-STRENGTH BEARING LOCK

For high-strength fastening of bushings, sleeves, gearwheels, pins, shaft and hub connections and bearings subjected to heavy loads.

- Reliable hardening at low temperatures down to 0°C. Also a reliable helper in winter!
- Can also be used on slightly oily surfaces. You save time-consuming degreasing of bearings
- Maximum gap filling capacity of 0.15 mm. Even major deviations can be corrected at low cost!
- Prevents fictional corrosion. Prevents bearings from seizing.

Physical Properties (in liquid state)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical characterization</td>
<td>Methacrylic ester</td>
</tr>
<tr>
<td>Color</td>
<td>Green</td>
</tr>
<tr>
<td>Viscosity (spindle 4/20 rpm) 25°C</td>
<td>Brookfield RVT 100 – 150 mPas</td>
</tr>
<tr>
<td>Density</td>
<td>1.07 g/cm³</td>
</tr>
<tr>
<td>Max. thread diameter</td>
<td>M 12</td>
</tr>
<tr>
<td>Max. gap filling capacity</td>
<td>0.15 mm</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 90 °C</td>
</tr>
<tr>
<td>Shelf life</td>
<td>1 year at room temperature</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contents</th>
<th>Art. No.</th>
<th>P.Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 g</td>
<td>0893 603 025</td>
<td></td>
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<tr>
<td>50 g</td>
<td>0893 603 050</td>
<td>1</td>
</tr>
<tr>
<td>250 g</td>
<td>0893 603 250</td>
<td></td>
</tr>
</tbody>
</table>

Physical Properties (when hardened)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting to the touch after</td>
<td>5 – 0 minutes</td>
</tr>
<tr>
<td>Usable after</td>
<td>30 – 40 minutes</td>
</tr>
<tr>
<td>Final setting after</td>
<td>3 – 6 hours</td>
</tr>
<tr>
<td>Break-loose torque</td>
<td>Eliminated</td>
</tr>
<tr>
<td>Just-move torque</td>
<td>Eliminated</td>
</tr>
<tr>
<td>Compression shear strength (DIN 54452)</td>
<td>18 – 26 N/mm²</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-55°C bis +150°C</td>
</tr>
</tbody>
</table>
Screw fixer and sealant – detachable

- Produces a medium-strength connection
  Can be disassembled again using normal tools
- Curing guaranteed even on non-pretreated parts
- Can also be used on uncleaned parts (e.g. in their as-delivered state)
- Can also be used on stainless steel and passivated surfaces
  No "accelerators" or "activators" required
- Excellent resistance to media and heat
  Universal products with a wide range of potential applications
- Prevents loosening due to e.g. vibrations and impact stresses
  No unwanted locking problems, e.g. as in the case of mechanical screw locks
- NSF-tested in accordance with NSF/ANSI 61

Physical Properties (when liquid)

<table>
<thead>
<tr>
<th>Chemical characterization</th>
<th>Dimethacrylic ester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>blue/fluorescent</td>
</tr>
<tr>
<td>Viscosity</td>
<td>5.000–7.000 mPas (spindle rpm: 1/20)</td>
</tr>
<tr>
<td></td>
<td>1.500–2.500 mPas (spindle rpm: 3/20)</td>
</tr>
<tr>
<td>Density</td>
<td>1.12 g/cm³</td>
</tr>
<tr>
<td>Max. thread diameter</td>
<td>M 36</td>
</tr>
<tr>
<td>Max. gap filling capacity</td>
<td>0.25 mm</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100°</td>
</tr>
<tr>
<td>Shelf life</td>
<td>1 year at room temperature</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contents</th>
<th>Art. No.</th>
<th>P Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 g</td>
<td>0893 243 025</td>
<td>1</td>
</tr>
<tr>
<td>50 g</td>
<td>0893 243 050</td>
<td></td>
</tr>
<tr>
<td>250 g</td>
<td>0893 243 250</td>
<td></td>
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</tbody>
</table>

Physical Properties (when hardened)

<table>
<thead>
<tr>
<th>Setting to the touch after</th>
<th>5 – 15 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable after</td>
<td>0.5 – 1 hour</td>
</tr>
<tr>
<td>Final setting after</td>
<td>1 – 3 hours</td>
</tr>
<tr>
<td>Break-loose torque</td>
<td>&gt; 21 Nm</td>
</tr>
<tr>
<td>Just-move torque</td>
<td>&gt; 10 Nm</td>
</tr>
<tr>
<td>Compression shear strength [DIN 54452]</td>
<td>8 – 12 N/mm²</td>
</tr>
<tr>
<td>Temperature range</td>
<td>–55°C to +150°C</td>
</tr>
</tbody>
</table>
Screw fixer and sealant – difficult to detach. For locking, fixing and sealing screws, stud bolts, nuts, threaded inserts and screw plugs that will not normally have to be removed again.

- Particularly suitable for screw connections subjected to heavy stresses
  No additional securing parts required.
- Disassembly only possible after heating to 300°C!
  Under normal conditions, can only be detached using a special tool and/or under the influence of temperature
- Excellent resistance to media and heat
  Universal products with a wide range of potential applications
- Prevents loosening due to e.g. vibrations and impact stresses
  No unwanted locking problems, e.g. as in the case of mechanical screw locks
  • NSF-tested in accordance with NSF/ANSI 61

### Physical Properties (when liquid)

<table>
<thead>
<tr>
<th>Physical Properties (when liquid)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Chemical characterization</td>
<td>Dimethacrylic ester</td>
</tr>
<tr>
<td>Color</td>
<td>green/fluorescent</td>
</tr>
<tr>
<td>Viscosity 25°C Brookfield RVT</td>
<td>400–600 mPas (spindle rpm: 2/20)</td>
</tr>
<tr>
<td>Density</td>
<td>1.11 g/cm³</td>
</tr>
<tr>
<td>Max. thread diameter</td>
<td>M 20</td>
</tr>
<tr>
<td>Max. gap filling capacity</td>
<td>0.15 mm</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100°C</td>
</tr>
<tr>
<td>Shelf life</td>
<td>1 year at room temperature</td>
</tr>
</tbody>
</table>

### Physical Properties (when hardened)

<table>
<thead>
<tr>
<th>Physical Properties (when hardened)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting to the touch after</td>
<td>10 – 20 minutes</td>
</tr>
<tr>
<td>Usable after</td>
<td>1–3 hours</td>
</tr>
<tr>
<td>Final setting after</td>
<td>5–10 hours</td>
</tr>
<tr>
<td>Break-lose torque</td>
<td>&gt; 30 Nm (M10)</td>
</tr>
<tr>
<td>Just-move torque</td>
<td>&gt; 45 Nm (M10)</td>
</tr>
<tr>
<td>Compression shear strength (DIN 54452)</td>
<td>12 - 15 N/mm²</td>
</tr>
<tr>
<td>Temperature range</td>
<td>−55°C to +150°C</td>
</tr>
</tbody>
</table>
PIPE SEALANT

For the sealing of all metallic pipe connections and fittings with conical/cylindrical threads pursuant to DIN 2999.

Mid-strength product

Low-strength product with PTFE

Content | Art. No. | P. Qty. |
---------|---------|---------|
50 g     | 0893 577 050 | 1       |
250 g    | 0893 511 250  | 1       |

Content | Art. No. | P. Qty. |
---------|---------|---------|
50 g     | 0893 511 050 | 1       |

Physical Properties

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Mid-strength product</th>
<th>Low-strength product with PTFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical characterization</td>
<td>dimethacryl ester</td>
<td>methacrylic ester</td>
</tr>
<tr>
<td>Color</td>
<td>yellow/fluorescent</td>
<td>white</td>
</tr>
<tr>
<td>Setting to the touch after</td>
<td>15 – 30 minutes*</td>
<td>15 – 30 minutes*</td>
</tr>
<tr>
<td>Final setting after</td>
<td>3 – 6 hours*</td>
<td>Approx. 12 hours*</td>
</tr>
<tr>
<td>Break-loose torque</td>
<td>15 – 20 Nm (M10)</td>
<td>5 – 8 Nm (M10)</td>
</tr>
<tr>
<td>Joint movement torque after hardening</td>
<td>10 – 15 Nm (M10)</td>
<td>4 – 7 Nm (M10)</td>
</tr>
<tr>
<td>Compressive shear strength after hardening</td>
<td>6 – 13 N/mm²</td>
<td>5 – 7 N/mm²</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-55°C to +150°C</td>
<td>-55°C to +200°C</td>
</tr>
<tr>
<td>Usable strength after</td>
<td>1 – 3 hours*</td>
<td></td>
</tr>
<tr>
<td>Max. thread diameter</td>
<td>R 3&quot; (M 80)</td>
<td></td>
</tr>
<tr>
<td>Max. gap filling capacity</td>
<td>0.50 mm</td>
<td></td>
</tr>
</tbody>
</table>

*material-dependent

Use:
The thread must be dry, dust and grease-free and capable of bearing loads. Tighten it (> 5 Nm), but do not turn the thread further.

Note:
Not suitable for screw connections containing copper (brass, bronze, red brass) that come into contact with water over 40°C. Not permitted for gas connections in buildings in Germany. Pursuant to TRGI ‘86/96. The thread must be cut in accordance with the standard. During and after hardening of the product, the connections may not be rotated, i.e. readjustment is not permissible.

Note:
- Tested quality.
- Physical properties:
  - Tested oxygen compatibility up to 60°C and 10 bar oxygen pressure (pipe sealant).
- Immediate sealing at up to 5 bar.
- Great media resistance.
- Other advantages:
  - Solvent-free.
  - Sealing compound does not leak out of thread.
  - Quick and secure mounting.

Note:
- Your advantages:
  - DVGW-approval (Reg. No. NG-5146BM0336+0037), tested in accordance with DIN EN 751-1.
  - NSF-tested pursuant to NSF/ANSI 61.
  - Neutral behavior in comparison to most industrial liquids and gases.
Notes:
Material is applied to the parts directly in liquid form and then hardens into a toughened plastic after installation. It completely fills the gaps so that the resulting connection provides excellent protection against corrosion from friction and protection against rust. A 100% seal is achieved.

Applications:
Automotive and utility vehicle industry, metal and tool manufacturing, ship building, machine and engine construction, electrical and electronics construction.

Mandatory warning symbols:
These products are free from mandatory warning symbols!

Your advantage:
They comply with Section 16, Paragraph 2 of the German Hazardous Material Ordinance. (“The worker must check whether substances, preparations or products with a lower health risk than those intended for use by him/her are available!”)

Resistance
Resistant to a large number of bases, gases, solvents, oils and fuels.

Notes on application
- The material is applied in liquid form directly and evenly to the oil-, grease- and dust-free surface.
- The cleaner the surface, the more secure the connection.
- These adhesives harden anaerobically, which means that they only harden where no atmospheric oxygen contacts the adhesive.
- For this reason, the containers a real so only filled to approx. 3/4.
- At the same time, the hardening speed is still being influenced by the catalytic effect of metal and the gap width.
- The more “passive” the material and the thicker the gap, the slower the material hardens.
- Passive materials: Nickel, zinc, tin, precious metals, aluminum with minimal copper and/or manganese content, highly-alloyed steel, oxide chromate coatings, plastic, glass and ceramic.
- Active materials: Steel, brass, bronze, copper, aluminum (copper content greater than 1%).
- For cleaning and degreasing, we recommend Brake Cleaner, Art. No. 089010871.

Attention:
- The following plastics can be attacked in case of longer exposure: ABS, celluloid, polystyrene, polycarbonate (Macrolon), PMMA (Plexiglas), polysulfone, SAN (Iuran, Tyril), Vinidur, vulcan fiber and painted surfaces. We always recommend that you conduct your own tests.

List of articles:

<table>
<thead>
<tr>
<th>Art No.</th>
<th>Description</th>
<th>Contents</th>
<th>P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0893 243 025</td>
<td>Mid-Strength Screw Lock</td>
<td>25 g</td>
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<tr>
<td>0893 243 050</td>
<td>Mid-Strength Screw Lock</td>
<td>50 g</td>
<td></td>
</tr>
<tr>
<td>0893 243 250</td>
<td>Mid-Strength Screw Lock</td>
<td>250 g</td>
<td></td>
</tr>
<tr>
<td>0893 270 025</td>
<td>High-Strength Screw Lock</td>
<td>25 g</td>
<td></td>
</tr>
<tr>
<td>0893 270 050</td>
<td>High-Strength Screw Lock</td>
<td>50 g</td>
<td></td>
</tr>
<tr>
<td>0893 270 250</td>
<td>High-Strength Screw Lock</td>
<td>250 g</td>
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<tr>
<td>0893 603 025</td>
<td>High-Strength Bearing Lock</td>
<td>25 g</td>
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<tr>
<td>0893 603 050</td>
<td>High-Strength Bearing Lock</td>
<td>50 g</td>
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</tr>
<tr>
<td>0893 603 250</td>
<td>High-Strength Bearing Lock</td>
<td>250 g</td>
<td></td>
</tr>
<tr>
<td>0893 620 050</td>
<td>Heat-Proof Fügefest (heat-resistant bearing lock)</td>
<td>50 g</td>
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</tr>
<tr>
<td>0893 620 250</td>
<td>Heat-Proof Fügefest (heat-resistant bearing lock)</td>
<td>250 g</td>
<td></td>
</tr>
<tr>
<td>0893 573 050</td>
<td>Green Surface Sealant</td>
<td>50 g</td>
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<tr>
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<td>Green Surface Sealant</td>
<td>250 g</td>
<td></td>
</tr>
<tr>
<td>0893 574 050</td>
<td>Orange Surface Sealant</td>
<td>50 g</td>
<td></td>
</tr>
<tr>
<td>0893 574 250</td>
<td>Orange Surface Sealant</td>
<td>250 g</td>
<td></td>
</tr>
<tr>
<td>0893 518 050</td>
<td>Low-Viscosity Surface Lock</td>
<td>50 g</td>
<td></td>
</tr>
<tr>
<td>0893 518 250</td>
<td>Low-Viscosity Surface Lock</td>
<td>250 g</td>
<td></td>
</tr>
<tr>
<td>0893 577 050</td>
<td>Pipe Sealant</td>
<td>50 g</td>
<td></td>
</tr>
<tr>
<td>0893 511 050</td>
<td>Pipe Sealant with PTFE</td>
<td>50 g</td>
<td></td>
</tr>
<tr>
<td>0893 511 250</td>
<td>Pipe Sealant with PTFE</td>
<td>250 g</td>
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<tr>
<td>0893 545 050</td>
<td>Hydraulic Seal</td>
<td>50 g</td>
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<tr>
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<td>Hydraulic Seal</td>
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<tr>
<td>0893 260 100</td>
<td>Engine Seal</td>
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</tbody>
</table>
## FLEXEN® ACCESSORIES

### ADHESIVE TAPES

<table>
<thead>
<tr>
<th>Fig.</th>
<th>Designation</th>
<th>Barrier layer</th>
<th>Width in mm</th>
<th>Length in m</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adhesive Tape, isogene gray</td>
<td>-</td>
<td>30</td>
<td>20</td>
<td>0874 100 011</td>
<td>20/1</td>
</tr>
<tr>
<td>2</td>
<td>Adhesive Tape, red</td>
<td>-</td>
<td>50</td>
<td>20</td>
<td>0874 100 040</td>
<td>20/1</td>
</tr>
<tr>
<td>3</td>
<td>Adhesive Tape, silver</td>
<td>-</td>
<td>50</td>
<td>20</td>
<td>0874 100 050</td>
<td>20/1</td>
</tr>
<tr>
<td>4</td>
<td>Adhesive Tape, black</td>
<td>-</td>
<td>50</td>
<td>20</td>
<td>0874 100 060</td>
<td>20/1</td>
</tr>
<tr>
<td>5</td>
<td>Fabric Adhesive Tape, silver</td>
<td>-</td>
<td>50</td>
<td>50</td>
<td>0874 100 200</td>
<td>12/1</td>
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<tr>
<td>6</td>
<td>Pure Aluminum Adhesive Tape</td>
<td>PE film</td>
<td>75</td>
<td>50</td>
<td>0874 100 341</td>
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<td>50</td>
<td>0874 100 342</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Pure Aluminum Adhesive Tape</td>
<td>Paper</td>
<td>50</td>
<td>100</td>
<td>0874 100 330</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>100</td>
<td>100</td>
<td>0874 100 331</td>
<td>1</td>
</tr>
</tbody>
</table>

### WRAPPING TAPES

<table>
<thead>
<tr>
<th>Fig.</th>
<th>for Flexen®</th>
<th>Designation</th>
<th>Width in mm</th>
<th>Thickness in mm</th>
<th>Roll Length in m</th>
<th>Art No.:</th>
<th>P.Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heating Rubber plus</td>
<td>Rubber Wrapping Tape, gray, self-adhesive</td>
<td>50</td>
<td>3</td>
<td>15</td>
<td>0874 105 010</td>
<td>12/1</td>
</tr>
<tr>
<td>2</td>
<td>Rubber plus</td>
<td>Rubber Wrapping Tape, black, self-adhesive</td>
<td>50</td>
<td>3</td>
<td>15</td>
<td>0874 105 020</td>
<td>12/1</td>
</tr>
<tr>
<td>3</td>
<td>Fleece Protective Hose</td>
<td>Fleece Wrapping Tape, self-adhesive</td>
<td>70</td>
<td>2</td>
<td>5</td>
<td>0874 105 040</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Fleece Protective Hose</td>
<td>Fleece Wrapping Tape with film</td>
<td>70</td>
<td>2</td>
<td>5</td>
<td>0874 105 041</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Fleece Protective Hose</td>
<td>Fleece Wrapping Tape, self-adhesive, with film</td>
<td>70</td>
<td>2</td>
<td>5</td>
<td>0874 105 042</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>Fleece Protective Hose</td>
<td>Fleece B2 Wrapping Tape with film</td>
<td>70</td>
<td>2</td>
<td>5</td>
<td>0874 105 070</td>
<td>20</td>
</tr>
<tr>
<td>7</td>
<td>Fleece Protective Hose</td>
<td>Fleece B2 Wrapping Tape, self-adhesive, with film</td>
<td>70</td>
<td>2</td>
<td>5</td>
<td>0874 105 071</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td>PE Protective Hose</td>
<td>PE Wrapping Tape, with film on one side</td>
<td>70</td>
<td>2</td>
<td>5</td>
<td>0874 105 060</td>
<td>16</td>
</tr>
<tr>
<td>9</td>
<td>PE Protective Hose</td>
<td>PE Wrapping Tape, self-adhesive, with film on one side</td>
<td>70</td>
<td>2</td>
<td>5</td>
<td>0874 105 061</td>
<td>16</td>
</tr>
</tbody>
</table>

* Delivered with 16 rolls of 5 m in 8 double rolls of 2 x 5 m each. The P. Qty. and the price however refers to 1 roll of 5 m.

### FLEXEN® SHELF

- ORSY® organisation
- Stable shelf for FLEXEN® pipe insulation
- Can be set up free-standing
- Wall and floor mounting required.
- Small base, yet large storage area as the shelf has four levels.
- The shelf is accessible from all sides.

Art No.: 0961 870
P.Qty. 1
**ADHESIVE MIRROR TAPE**

**Double-sided adhesive tape with polyethylene carrier and acrylate adhesive.**

- **Very good compatibility with all known surfaces.**
  **Your advantage:**
  The adhesive tape is suited for adhesion to many different materials, such as wood, metal, glass, stone, Plexiglas, and Macrolon (no formation of tension cracks).

- **High initial stickiness.**
  **Your advantage:**
  Directly after assembly, a sufficient application safety is achieved (optimum final hardness after 24 hours).

- **UV and moisture-resistant.**
  **Your advantages:**
  The adhesive tape can be used both indoors and outdoors. The adhesive force is not impaired by the humidity in sanitary areas.

- **Good fit.**
  **Your advantage:**
  The tape fits slightly uneven surfaces very well (the unevenness, however, may not be stronger than the tape itself).

- **Resistant to ageing.**
  **Your advantage:**
  In case of proper use, the tape does not lose its elasticity and permits adhesion over many years.

### Notes on application
- The surfaces to be glued must be dry and dust, grease, and silicone free.
- To ensure proper adhesion, the tape must be sufficiently pressed onto the material to be glued.
- Optimum final strength is achieved after 24 hours.
- With critical surfaces (e.g., PP, PE, rubber) and porous foundations (e.g., wood, stone), please carry out preliminary tests.
- In cases where plastics containing softener additives are to be adhered, the softener can modify the adhesive coating. This impairs the strength of the adhesive.
- In case of safety mirrors (recognisable by a blue or green foil on the back side of the mirror), mirror manufacturers generally recommend an additional mechanical fastening. Please observe the mounting instructions on the back!

### Applications
- Mounting of mirror.
- Attachment of window bars.
- Attachment of dispensers and mounts in sanitary areas.
- Attachment of hooks

### Technical data

<table>
<thead>
<tr>
<th>Colour</th>
<th>width in mm</th>
<th>Length in m</th>
<th>Thickn. in mm</th>
<th>Art. No.</th>
<th>P Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>19</td>
<td>25</td>
<td>1</td>
<td>0894 918 0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td></td>
<td></td>
<td>0894 918</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>12</td>
<td>1.6</td>
<td></td>
<td>0894 919</td>
<td></td>
</tr>
</tbody>
</table>

### Applications

<table>
<thead>
<tr>
<th>Art. No. 0894918 0 / 0894 918</th>
<th>Art. No. 0894 919</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesive basis</td>
<td>Acrylate adhesive</td>
</tr>
<tr>
<td>Carrier</td>
<td>Polyethylene foam</td>
</tr>
<tr>
<td>Bonding strength</td>
<td>23 N / 25 mm</td>
</tr>
<tr>
<td>Elongation at tear</td>
<td>&gt;150%</td>
</tr>
<tr>
<td>Application temperature</td>
<td>+5 °C to +40 °C</td>
</tr>
<tr>
<td>(applies to the surface and the adhesive tape)</td>
<td></td>
</tr>
<tr>
<td>Thermal stability</td>
<td>-40 °C to +95 °C</td>
</tr>
<tr>
<td>Shelf life (at approx. +20 °C and 50% humidity)</td>
<td>24 months</td>
</tr>
<tr>
<td>UV resistance</td>
<td>given</td>
</tr>
<tr>
<td>Moisture resistance</td>
<td>given</td>
</tr>
</tbody>
</table>

**Please observe the mounting instructions on the back!”**
**Mounting Instructions for Adhesive Mirror Tape**

In case of mirror adhesion, make sure that the tape strips are applied only vertically and in several strips to reduce shearing and tractive forces and to distribute these forces across the entire adhesive surface.

**Quantity of Adhesive Tape to Use**

<table>
<thead>
<tr>
<th>Adhesive Tape</th>
<th>Mirror Surface</th>
<th>3mm</th>
<th>4mm</th>
<th>5mm</th>
<th>6mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>19mm 25mm</td>
<td>100cm²</td>
<td>3cm</td>
<td>4cm</td>
<td>5cm</td>
<td>6cm</td>
</tr>
<tr>
<td>19mm 25mm</td>
<td>200cm²</td>
<td>5cm</td>
<td>7cm</td>
<td>9cm</td>
<td>10cm</td>
</tr>
<tr>
<td>19mm 25mm</td>
<td>500cm²</td>
<td>13cm</td>
<td>17cm</td>
<td>20cm</td>
<td>25cm</td>
</tr>
<tr>
<td>19mm 25mm</td>
<td>1000cm²</td>
<td>25cm</td>
<td>40cm</td>
<td>45cm</td>
<td>50cm</td>
</tr>
<tr>
<td>19mm 25mm</td>
<td>2000cm²</td>
<td>50cm</td>
<td>70cm</td>
<td>85cm</td>
<td>100cm</td>
</tr>
<tr>
<td>19mm 25mm</td>
<td>5000cm²</td>
<td>125cm</td>
<td>175cm</td>
<td>225cm</td>
<td>250cm</td>
</tr>
<tr>
<td>19mm 25mm</td>
<td>10000cm²</td>
<td>250cm</td>
<td>335cm</td>
<td>450cm</td>
<td>500cm</td>
</tr>
</tbody>
</table>

With this information, we want to advise you to the best of our knowledge based on our tests and experience. However, we can assume no liability for the application results in individual cases due to the large number of applications and to the fact that storage and application conditions are beyond our influence. This also applies to the use of the non-binding technical and commercial Customer Service we provide. We always recommend that you conduct your own tests. We guarantee the consistent quality of our products. We reserve the right to make technical changes and carry out further development.
**BUTYL TAPE**

Strongly adhesive, double-sided sealing tape made of butyl rubber for overlapping seals.

Very good compatibility with all known surfaces.
- Very good compatibility with metals, concrete, masonry, wood, glass, hard PVC, bitumen, paint systems, as well as very good adhesion properties, makes a number of combinations in sealing systems possible.

Excellent resistance to UV, weathering and water.
- For both indoor and outdoor use.

**Additional properties**
- Impermeable to vapor diffusion.
- Self-fusing.
- Compatible with Plexiglas and Macrolon.

**Fields of application:**
- For the connection of seams and the gluing of vapor barrier films.
- Overlapping seals for vehicle and roof mounting parts, for facades and equipment construction, in the furniture and interior design industry, for sanitation and electrical installations, and all similar applications.

<table>
<thead>
<tr>
<th>Width in mm</th>
<th>Length in mm</th>
<th>Thickness in mm</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>15</td>
<td>2</td>
<td>0894 700 122</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>15</td>
<td>2</td>
<td>0894 700 202</td>
<td>1</td>
</tr>
</tbody>
</table>

**BUTYL ROUND CORD**

- For the round butyl cord, the same product technical properties as in the case of the butyl tape (Art. No. 0894 700 122 / 202) apply.

**Fields of application:**
- Fastening of mounting parts of vehicles, such as the gluing of lower door cover films, attachment of decorative moldings.
- Sealing of storage tanks, silos, roofs made of trapezoidal plates, and others to prevent vibrations.
- All overlapping seals as with butyl tape (see above).
- Ideal use on uneven foundations.

<table>
<thead>
<tr>
<th>Dia in mm</th>
<th>Length in mm</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5 x 16 (80)</td>
<td>0894 700 380</td>
<td>1</td>
</tr>
</tbody>
</table>

With this information we want to advise you to the best of our knowledge based on our tests and experience. We assume no liability for the application results in individual cases, however, due to the large number of applications and the storage and application conditions that lie outside the scope of our influence. This also applies to the use of the non-binding technical and commercial customer service we provide. We always recommend that you conduct your own tests. We guarantee the consistent quality of our products. We reserve the right to make technical changes and carry out further development. For further information, see the Technical Data Sheet.
ADHESIVE TRIM TAPE

High-strength double-sided adhesive tape with polyethylene carrier and acrylate adhesive.

► Very strong adhesion.
Your advantages:
• The tape provides outstanding adhesion immediately after installation of the trim. A high level of final adhesive strength is achieved after a curing time of 24 hours.
• Very strong adhesion also on rough and slightly uneven surfaces.

► Foam carrier.
Your advantage:
• The tape has a vibration-damping effect and compensates for the expansion properties of two different materials.

► High temperature, UV and weather resistance.
Your advantages:
• The tape can be used indoors as well as outdoors.
• Does not lose adhesion at higher temperatures.

Instructions for use
• The surfaces to be joined must be dry and free from dust, grease and silicon.
• In order to assure perfect adhesion, sufficient pressure must be applied to the tape during installation.
• Optimal final adhesive strength is reached after 24 hours.
• In case of sensitive surface finishes (e.g. PP, PE, rubber) and porous surfaces (e.g. wood or stone), carry out a preliminary application test.
• In case of plastic materials to be joined containing plasticizer additives, these additives may change the adhesive layer and impair the strength of the adhesive (perform preliminary test).

Areas of application:
• Trim and functional metal strips, logos, emblems, screens and holding brackets in the automobile industry.
• Attachment of name plates on machines.
• For attachment of spoilers in connection with mechanical elements.

Specifications:

<table>
<thead>
<tr>
<th>Width mm</th>
<th>Length m</th>
<th>Thickness mm</th>
<th>Art. No.</th>
<th>P.Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10</td>
<td>0.8</td>
<td>0894 910 4</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td>0894 910</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>0894 910 0</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>0894 910 1</td>
<td></td>
</tr>
</tbody>
</table>

These notes are intended to provide our advice to the best of our knowledge, based on tests and experience. However, we cannot assume any liability for processing results in individual cases due to the wide variety of applications as well as storage and processing conditions beyond our control. This also applies in case our technical and commercial customer service is consulted free of charge and without obligation. We recommend carrying out individual tests. We guarantee the constant quality of our products. We reserve the right to make technical modifications and advanced developments.

Adhesive base: acrylate adhesive
Carrier: Polyethylene (anthracite)
Adhesive strength: 19N / 25 mm
Elongation at rupture: > 300%
Application temperature: +5°C to +40°C (applies to surface and adhesive tape)
Temperature stability: -40°C to +95°C
Shelf life (at approx. +20°C and 50% humidity): 12 months
UV resistance: yes
Moisture resistance: yes
Automotive sealing tape protects against vibration and will seal gaps securely and permanently in one go. After release of the compression the tape will expand and develop a pressure which firmly presses against the gap surfaces and levels up uneven parts.

- Pre-compressed.
- Self adhesive on one side.
- Temperature resistance: -30°C to +90°C.

Advantages
- Can be painted over with common is persian lacquers.
- Open to diffusion, thus avoiding of water accumulation

Assembly Instructions
- Clean the gap/surface from oil, grease and loose particles.
- Remove cover paper from the sealing tape.
- Adhere sealing tape to the surface or apply directly from the roll to the gap.

Assembly Instructions
- Sealing and protecting parts against vibration in ventilation and heating systems, tanks, frame supports or lateral supports of the boot lid etc.
- To protect against vibration when fitting radios and speakers etc.
- For coating aerial cable (i.e. VW, Ford).

<table>
<thead>
<tr>
<th>Automotive Sealing Tape</th>
<th>Width (mm)</th>
<th>Thick 1</th>
<th>Thick 2</th>
<th>Gap width (mm)</th>
<th>Roll length (m)</th>
<th>Art No.</th>
<th>Pack Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>2</td>
<td>10</td>
<td>2-3</td>
<td>12.5</td>
<td></td>
<td>0875 410 2</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>2</td>
<td>10</td>
<td>2-3</td>
<td>12.5</td>
<td></td>
<td>0875 420 2</td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>3</td>
<td>15</td>
<td>3-4</td>
<td>10.0</td>
<td></td>
<td>0875 415 3</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>4</td>
<td>20</td>
<td>4-5</td>
<td>8.0</td>
<td></td>
<td>0875 415 4</td>
<td></td>
</tr>
</tbody>
</table>

1) Thickness compressed to 20%.
2) Thickness when expanded.
Permanently plastic, self-adhesive sealing tape or round strip for sealing of overlapping car body panels.

- Very good adhesive properties.
  **Your advantage:**
  - The tape offers very good adhesion as well as permanent bonding on various different surfaces, e.g. metal, plastic, wood, stone, etc. (see processing notes).

- Good UV, weather and water resistance.
  **Your advantage:**
  - Also suitable for outdoor use, resistant to rain and other weather influences (not for use in submerged condition).

- Resistant to ageing and high temperatures.
  **Your advantage:**
  - Provided the tape is used expertly, adhesion and sealing is assured over a number of years.
  - Also suitable for high-temperature applications, for example, sealing of car bodies.

- Steam diffusion layer.
  **Your advantage:**
  - The sealing tape or round strip enable water-tight sealing and prevent the penetration of moisture into the car body.

Other features:
- Noise and vibration damping.
- Self-fusing.
- Free of solvents and silicone.
- Immediately ready for use.

Areas of application:
- Universal use for sealing of overlaps and screw connections in the automotive industry, container and motor home construction, for example: ‘between fender and body, at brake and rear lights (particularly round sealing strip), at trim parts and sunroofs.

- Also suitable for general sealing jobs to protect against dust, moisture and vibrations in electrical, machinery and construction applications as well as heating, ventilating and air-conditioning, for example, between screw-connected parts, in seams, joints, housings of all types and pipe lead-throughs.

Instructions for use:
- The surfaces to be sealed must be dry, stable and free from grease and dust.
- The application temperature must not be below +5°C.
- Absorbent and porous surface must be pretreated with Würth Butyl/Bitumen Primer (Art. No. 0892 875).
- The car body sealing tape or round sealing strip must be pressed down carefully against the surface. Press the sealing surfaces together firmly to achieve an effective seal.
- Butyl has a tendency towards “cold flow” (flow property of the tape). Therefore, butyl products should always be attached mechanically, i.e. with screwing components or use of a contact profile.
- Applying excessive pressure to the profile will cause “squeezing out” of the sealing compound. Never compress Butyl products to their zero point (use washer as spacer).

Specifications:

<table>
<thead>
<tr>
<th>Designation</th>
<th>C</th>
<th>Width mm</th>
<th>Thick mm</th>
<th>Length, mm</th>
<th>Art No</th>
<th>Pack Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car body sealing tape</td>
<td>grey</td>
<td>20</td>
<td>2</td>
<td>26 (4 x 6.5)</td>
<td>0890 100 030</td>
<td>1/4</td>
</tr>
<tr>
<td>Car body round sealing strip</td>
<td>black</td>
<td>8</td>
<td>17,5 (7 x 2.5)</td>
<td>0890 100 033</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>10 (5 x 2)</td>
<td></td>
<td>0890 100 032</td>
<td></td>
</tr>
</tbody>
</table>

Additional products:
- Butyl/Bitumen Primer
  **Art. No.** 0892 875
PTFE THREAD SEALING HEMP

The universal thread sealant made of 100% pure, multi-fiber PTFE for sealing metal or plastic thread connections.

Application
Used to seal pipe threads up to 6" for:
- Cold water
- Hot water
- Drinking water
- Heating
- Gas
- Solar

Also highly suitable for compressed-air, hydraulic, pneumatic and a variety of other types of applications.

<table>
<thead>
<tr>
<th>Spool Length</th>
<th>Art. No.</th>
<th>P Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 m</td>
<td>0985 030 150</td>
<td>1</td>
</tr>
</tbody>
</table>

Advantages
- **100% PTFE**
  Tried-and-tested material for sealing threads. Resistant to almost all known chemicals and microbiological processes.
- **Multi-fiber**
  Inserts well into the thread. High tensile strength and highly tear-resistant.
- **DVGW approval**
  Safety-tested in gas, drinking-water and hot-water applications. Can be adjusted/turned back up to 45°.
- **Permanently elastic**
  Does not harden, does not become brittle, does not rot, lasts indefinitely.
- **Silicone-free**

Technical data

<table>
<thead>
<tr>
<th>Material</th>
<th>100% pure PTFE (polytetrafluor ethylene), silicone-free</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature resistance</td>
<td>-200°C to +260°C</td>
</tr>
<tr>
<td>DVGW tested, ARp class</td>
<td>For gas, drinking water and hot water according to DVGW approval NV-S142 BS0140</td>
</tr>
<tr>
<td>Resistance to chemicals, liquids, oils, solvents, gases and acids</td>
<td>very good</td>
</tr>
<tr>
<td>Resistance to mold, fungus and bacteria</td>
<td>very good</td>
</tr>
</tbody>
</table>
PTFE THREAD SEALING TAPE

Application:
- Used to seal thread connections.

Advantages:
- DVGW-tested (thickness: 0.1mm) pursuant to DIN EN 751/3 (97) and DIN 30660 (99).
- Resistant to all aggressive media.
- Thermal stability* -240°C to +240°C.
- Pressure resistance* up to 25 bar.
- Does not stick or swell. Therefore prevents seizing of the thread.
- Alignment of the thread connection, which includes limited turn-back, is permissible.

*Since the temperature and pressure are dependent on one another, it is not permissible to allow both to be pushed to maximum levels simultaneously. In addition, the specifications depend on the respective medium. For this reason, these specifications can only serve as a guideline due to the variety of application options (see also DVGW approval).

<table>
<thead>
<tr>
<th>Designation</th>
<th>Width in mm</th>
<th>Length in m</th>
<th>Thckn. in mm</th>
<th>Surface based mass g/m²</th>
<th>DVGW tested</th>
<th>For</th>
<th>Art No.:</th>
<th>P Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRp PTFE Thread Sealing Tape</td>
<td>12</td>
<td>12</td>
<td>0.1</td>
<td>60</td>
<td>x</td>
<td>Fine thread (DN≤10)</td>
<td>0985 030160</td>
<td></td>
</tr>
<tr>
<td>GRp PTFE Thread Sealing Tape</td>
<td>12</td>
<td>12</td>
<td>0.1</td>
<td>100</td>
<td>x</td>
<td>Coarse thread (10&lt;DN≤50)</td>
<td>0985 030161</td>
<td></td>
</tr>
<tr>
<td>PTFE Thread Sealing Tape</td>
<td>12</td>
<td>12</td>
<td>0.08</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>0985 030165</td>
<td>10</td>
</tr>
</tbody>
</table>
Low volatile, high-temperature silicone adhesive and sealant

- Oxygen sensor safe - no risk of engine problems resulting from damaged circuit boards or electronics components as can be the case with non-compatible compounds
- Ideal for making gaskets on all engines, sealing windscreens, light housings, hose connections and for insulating wiring.
- Temperature resistant from -73°C to +315°C.
- Resistant to all transmission fluid, anti-freeze, diesel fuel, water, steam and lubricants.
- Conforms to GM 9985443

Application:
Clean sealing surface thoroughly. Depress nozzle to one side and apply a thin even bead to one surface. Allow 10 mins before final assembly. Remove excess RTV with a non-flammable cleaning fluid or once cured with a knife. Sealant is fully cured in 10-12 hours.

After use leave a small amount of silicone protruding from nozzle and replace cap. This will cure and act as an easily removed plug when used next.

Caution:
Uncured sealant evolves acetic acid slowly during cure. Please follow safety and usage guidelines on container.
SILICONE SPECIAL

Silicone Special 180

- Cold-vulcanizing silicone rubber.
- Permanently elastic silicone sealing compounds for engine and vehicle body.
- For sealing surfaces, gaps and cracks in water pumps, oil pans, coolers, crankcases etc.
- Bridges larger rough areas.
- Seals reliably, even after withstanding years of vibrations.
- Outstanding adhesion.
- Does not run or draw threads.
- Outstanding resistance to chemicals.
- Skin formation after just a few minutes, vulcanization duration approx. 1.5mm/day.

Areas of use:
- Separating joints, cylinder head, crankcase, water pump, oil pan, cooler, axle tube, cylinder base (motorcycle), lamp and blinker housing, weld seams etc.

<table>
<thead>
<tr>
<th>Colour</th>
<th>Content</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent</td>
<td>100 g /70 ml</td>
<td>0890 320</td>
<td>10</td>
</tr>
<tr>
<td>Blue</td>
<td></td>
<td>0890 322</td>
<td></td>
</tr>
</tbody>
</table>

Silicone Special 250

- Thermally stable from -50°C to +150°C briefly up to +180°C.

Areas of use:
- Separating joints, cylinder head, crankcase, water pump, oil pan, cooler, axle tube, cylinder base (motorcycle), lamp and blinker housing, weld seams etc.

<table>
<thead>
<tr>
<th>Colour</th>
<th>Content</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>100 g /70 ml</td>
<td>0890 321</td>
<td>10</td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td>0890 323</td>
<td></td>
</tr>
</tbody>
</table>
EXHAUST ASSEMBLY PASTE

- Soft paste for fast, easy and totally gas tight sealing of flanges and sleeve fittings in the exhaust system.
- No welding necessary.
- The paste becomes metal hard, with exhaust heat.
- Temperature resistant up to approx. 700°C.
- Seals permanently.
- Shock and vibration resistant.
- No corrosion in joints, therefore easy disassembly

<table>
<thead>
<tr>
<th>Content g</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>0890 100 045</td>
<td>12</td>
</tr>
</tbody>
</table>

EXHAUST PUTTY

- Small holes and cracks in the exhaust system can be repaired easily.
- Extreme heat resistance.
- Resistant to high temperature fluctuations.
- Exhaust system may be repaired

<table>
<thead>
<tr>
<th>Content g</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>0890 100 046</td>
<td>10</td>
</tr>
</tbody>
</table>
**Polyester Styrene Free**

- Enables the bonding of awkward fixings and problematic materials.
- The polyester resin has ease of application and high tensile strength when set.

**Applications:**

**Hollow materials:**
Remedial wall tiles, wall plates, brackets and fabricated stairways.

**Solid materials:**
Railings/balustrades, reinforcing rods, retaining masonry facades using threaded rod.

**Services:**
For fixing pumps, fans, vibration proof fixing of motors, radiators, air conditioning units etc.

**Cure times:**
- at 5°C: 50 minutes
- at 15°C: 35 minutes
- at 25°C: 30 minutes

Art. 9031 380 500.380ml

---

**Epoxy Acrylate Styrene Free**

- As above but approved for under water use
- Cure time should be doubled when used in wet holes.

Art. 9031 380 550.380ml
LIQUID METAL FE1

Ideal, fast-acting repair system for installers and workshops in the metal-processing field. Especially suitable for filling shapes, sealing and spackling leaky spots.

- Fe1 is a high-quality two-component reaction resin system that exhibits characteristics of metal due to its special formula.
- The ideal mixing ratio of the components (A:B = 1:1, pressing out two strands of the same length from the tubes) makes faulty mixing of the repair mass almost impossible.
- Fe1 is specially designed for smaller repair jobs under pressure of time.
- Fe1 can be applied with a spatula and does not run, which makes vertical application possible as well.
- After hardening, Liquid Metal Fe1 can easily be processed via lathing, milling, drilling, filing or thread cutting, just like with metal.

Technical data

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture ratio</td>
<td>A:B = 1:1</td>
</tr>
<tr>
<td>Tack cure time</td>
<td>7 – 12 min. (at room temperature)</td>
</tr>
<tr>
<td>Hardening time</td>
<td>4 – 24 h (at room temperature)</td>
</tr>
<tr>
<td>Pot life</td>
<td>5 min./20g (at room temperature)</td>
</tr>
<tr>
<td>Consistency</td>
<td>does not run</td>
</tr>
<tr>
<td>Spec. weight</td>
<td>2.80 (components A and B mixed)</td>
</tr>
<tr>
<td>Compressive strength</td>
<td>70 N/mm²</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>12.5 N/mm²</td>
</tr>
<tr>
<td>Shear tension</td>
<td>14.5 N/mm²</td>
</tr>
<tr>
<td>Temperature resistance</td>
<td>0.7 kcal/m²°C, - 60°C to + 120°C</td>
</tr>
<tr>
<td>Dimensional stability/Martens</td>
<td>+ 40°C</td>
</tr>
<tr>
<td>Linear expansion coefficient</td>
<td>+ 40 x 10–6°C</td>
</tr>
<tr>
<td>Tempering</td>
<td>up to + 120°C/1h</td>
</tr>
<tr>
<td>Shelf life</td>
<td>at least 2 years</td>
</tr>
<tr>
<td>Total weight</td>
<td>500 g</td>
</tr>
</tbody>
</table>

Glass Fabric Ribbon

- For strengthening the metal mass when repairing with Liquid Metal Fe1.
- Dimensions: 1,000 x 50 x 1.3
Art. No. 0894 650P.
Qty. 1

Processing instructions

The metals must be cleaned and degreased bare. Mix components A and B homogeneously 1:1. Apply mixture immediately with a spatula (short pot life). The hardened liquid metal can be lathed, milled, drilled etc. Please note the accompanying application instructions.

<table>
<thead>
<tr>
<th>Contents in g</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>0893 449</td>
<td>1</td>
</tr>
</tbody>
</table>

Application overview

<table>
<thead>
<tr>
<th>Abrasions on:</th>
<th>Leak-sealing on:</th>
<th>Blowholes in:</th>
<th>Run-in damage on:</th>
<th>Creation of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>pump housings</td>
<td>cooling units</td>
<td>grey cast iron during casting</td>
<td>shafts</td>
<td>shapes</td>
</tr>
<tr>
<td>impellers</td>
<td>tankcasting</td>
<td>grey cast iron during processing</td>
<td>hydraulic cylinders</td>
<td>retainers</td>
</tr>
<tr>
<td>propellers</td>
<td>water tanks</td>
<td></td>
<td>blocks</td>
<td>models</td>
</tr>
<tr>
<td>rudders</td>
<td>water pipes</td>
<td></td>
<td>bearing seats</td>
<td>guides</td>
</tr>
<tr>
<td>heat exchangers</td>
<td>oil pipes</td>
<td></td>
<td>crankcases</td>
<td>prototypes</td>
</tr>
<tr>
<td>condensers</td>
<td>housings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dust pipes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>slides</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>chutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bolts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>torn-out threads</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**PUTTY REPAIR STICKS**

an epoxy based hand malleable putty with the hardener forming the core of the stick

- When mixed the product rapidly hardens ensuring rapid repairs to many different components and materials.
- When fully cured the material can be drilled, tapped, filed, sanded or overpainted.
- Simple to use putty formulation ensures no runs or drips of product.
- Adheres even in the presence of liquids e.g. underwater.

<table>
<thead>
<tr>
<th>Contents g</th>
<th>Description</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>Steel</td>
<td>1993 01</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Plastic</td>
<td>1993 02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aluminium</td>
<td>1993 03</td>
<td></td>
</tr>
</tbody>
</table>

### Technical Data

<table>
<thead>
<tr>
<th></th>
<th>Epoxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resin</td>
<td></td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>Hydrocarbons, ketones, alcohols, esters, salt solutions, dilute acids, petrol diesel and oils</td>
</tr>
<tr>
<td>Electric Resistance</td>
<td>30,000Ω</td>
</tr>
<tr>
<td>Dielectric Strength</td>
<td>300V/mm</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>less than 1%</td>
</tr>
<tr>
<td>Non Volatile Content</td>
<td>100%</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>12,000psi</td>
</tr>
<tr>
<td>Maximum Temperature Resistance</td>
<td>120°C continuous</td>
</tr>
<tr>
<td></td>
<td>150°C temporarily</td>
</tr>
<tr>
<td>Initial Cure</td>
<td>maximum 1 hour</td>
</tr>
<tr>
<td>Full Cure</td>
<td>maximum 24 hours</td>
</tr>
<tr>
<td>Shore Hardness D</td>
<td>80 after 24 hours</td>
</tr>
<tr>
<td>Working Time</td>
<td>3.5 minutes</td>
</tr>
</tbody>
</table>

### Application Areas

<table>
<thead>
<tr>
<th>Steel Epoxy Stick</th>
<th>Plastic Epoxy Stick</th>
<th>Aluminium Epoxy Stick</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cylinderblocks</td>
<td>• Bumpers</td>
<td>• Radiators</td>
</tr>
<tr>
<td>• Heads</td>
<td>• Dash board components</td>
<td>• All aluminium components</td>
</tr>
<tr>
<td>• Castings</td>
<td>• Fibreglass</td>
<td></td>
</tr>
<tr>
<td>• Damaged threads</td>
<td>• Washer bottles</td>
<td></td>
</tr>
<tr>
<td>• Worn Shafts</td>
<td>• Baths</td>
<td></td>
</tr>
<tr>
<td>• Water Pipes</td>
<td>• Swimming pools</td>
<td></td>
</tr>
<tr>
<td>• All steel components</td>
<td>• Pipes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• All plastic components</td>
<td></td>
</tr>
</tbody>
</table>

This information is intended as a recommendation only, based on our experience. Preliminary tests to verify material compatibility should be carried out. The cleaning and care instructions of the manufacturer must be observed!
INDUSTRY CLEANER

High-quality special cleaner for industry and craft trades.

- Simple removal of adhesive residues, labels and adhesive tape.
- Stubborn soiling like wax, rubber abrasion, silicone residues, permanent marker, oil and grease are dissolved.

Gentle on materials.
- Sensitive surfaces such as aluminum, brass and stainless steel are not attacked.

User-friendly
- No unpleasant odours for user and environment.
- Quick and effective cleaning.

Acetone-free.

Silicone-free and AOX-free

Areas of application:
Removes adhesive residues from machine parts, plastic parts and metallic surfaces. Also suitable for removing protective preservatives e.g. on brake discs or for pre-cleaning of adhesive bonds.

Note:
Check rubber and plastic parts for compatibility in a location not visible prior to treatment. Paints may be attacked.

<table>
<thead>
<tr>
<th>Designation</th>
<th>Contents</th>
<th>Art. No.</th>
<th>P. Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol can</td>
<td>500ml</td>
<td>0893 140</td>
<td>1/12</td>
</tr>
<tr>
<td>Canister</td>
<td>5 L</td>
<td>0893 140 05</td>
<td>1</td>
</tr>
<tr>
<td>Pump Spray Bottle, Neutral</td>
<td>-</td>
<td>0891 501</td>
<td></td>
</tr>
<tr>
<td>Tap</td>
<td>-</td>
<td>0891 302 01</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REFILLOmat</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Designation /Container</td>
<td>Contents</td>
<td>Art. No.</td>
<td>P. Qty.</td>
</tr>
<tr>
<td>REFILLOmat can</td>
<td>400ml</td>
<td>0891 881 16</td>
<td>1/12</td>
</tr>
<tr>
<td>REFILLOmat canister</td>
<td>20 L</td>
<td>0893 140 520</td>
<td>1</td>
</tr>
<tr>
<td>REFILLOmat station</td>
<td>-</td>
<td>0961 891 023</td>
<td></td>
</tr>
</tbody>
</table>

This information is only a recommendation based on our experience. For further information, see the technical information leaflet.
**Retro-reflective warning marking**

Conforming to ECE 104

- With ECE certification, can be used without special approval
- Film: Type III (retro-reflective)
- Very thin single-layer film:
  - No damaging by water, gasoline or high-pressure cleaning.
  - Can easily be adhered around corners.
  - No separate sealing of edges necessary.
  - Can be used on fixed surfaces and tarps.
- All films are self-adhesive.

**Applications for retro-reflective markings conforming to ECE 104**

<table>
<thead>
<tr>
<th>Vehicles for passenger transport (M)</th>
<th>Attachment to new vehicles to be approved compulsory</th>
<th>Fitting to existing vehicles is allowed</th>
<th>Fitting to existing vehicles is not allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1 - Car seating a maximum of 9 persons</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>M2 - Car seating more than 9 persons M3</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vehicles for goods transport (N)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N1 / N2 - Utility vehicles with a max. weight up to 7.5 t</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N3 / N4 - Utility vehicles with a max. weight from 7.5 t to 10 t</td>
<td>•</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trailers and semi-trailers (O)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>O1 - Trailer with max. weight up to 0.75 t</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O2 - Trailers with a max. weight from 0.75 t to 3.5 t</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O3 - Trailers with a max. weight from 3.5 t to 10 t</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O4 - Trailers with a max. weight over 10 t</td>
<td>•</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* as of 10.10.2007

**Line marking**

Pursuant to Section 51a (4) of the German Road Traffic Licensing Regulations (StVZO) in conj. with Section 49c (7) of the German Road Traffic Licensing Regulations (StVZO) in conj. with the Annex to Section 53 (1) (O) of the German Road Traffic Licensing Regulations (StVZO) Clause 1 No. 3 and Clause 2.

Permissible colors: yellow, white, red (for rear marking only).

**Contour marking**

Pursuant to Section 53 (1) (O) of the German Road Traffic Licensing Regulations, Clause 1, No. 3 and Clause 2 in conjunction with Section 49c (7) of the German Road Traffic Licensing Regulations.

Permissible colors: yellow, white, red (for rear marking only).

**Color** | **Application**            | **Strip width** | **Roll length** | **Art. No.** | **P. Qty.** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yellow</td>
<td>Fixed surfaces</td>
<td>50 mm</td>
<td>50 m</td>
<td>1812 44 71</td>
<td></td>
</tr>
<tr>
<td>white</td>
<td>Fixed surfaces</td>
<td></td>
<td>12.5 m</td>
<td>0812 44 710</td>
<td>1</td>
</tr>
<tr>
<td>red</td>
<td>Fixed surfaces</td>
<td></td>
<td>50 m segmented</td>
<td>1812 44 711</td>
<td></td>
</tr>
<tr>
<td>yellow</td>
<td>Truck rear set</td>
<td></td>
<td></td>
<td>1812 44 751</td>
<td></td>
</tr>
<tr>
<td>white</td>
<td>Truck rear set</td>
<td></td>
<td></td>
<td>1812 44 731</td>
<td></td>
</tr>
<tr>
<td>red</td>
<td>Tarps &amp; Tank rear set</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Sticker spacing on the vehicle should be max 8cm
TARP REPAIR SYSTEM

Mobile, self-adhesive repair system for defective truck tarps, tents, covers and much more.

Problem solution – Simple, long-lasting and mobile

Simple, professional repair.
- Ready-to-use patches with high bonding strength.
- Fast application.
- Large choice of colors.

Can be used on the go.
- Fast, reliable repair of damaged areas at any time.

Cost-optimized.
- No need to visit a workshop.
- Repair times are considerably reduced.
- Unnecessary down times are decreased.
- No more recourse claims based on freight damage.

UV-resistant.
Resistant to washing brushes.

Areas of application:
Unique system for the repair of defective tarps on the road and in the repair shop. Holes, rips and tears can be repaired permanently in an uncomplicated manner at low cost. Can be used for truck tarps, event tents, impact and piste guards as well as box bodies, campers, ski boxes and much more.

Note:
Application temperature: -15°C to +40°C,
Temperature-resistance: -40°C to +70°C

Use:
The surface must be clean, dry and grease-free. Clean dirt and oil over a large area from the defective spots with a clean cloth [TexRein, Art. No. 0899 810] and 1A Assembly and Part Cleaner Art. No. 0890 106 500. Select a patch and remove the protective film. Adhere the patch onto the surface without folds, press it firmly into place and hit it using a rubber mallet on a firm surface, if necessary. Attention! – The patch cannot be pulled off and corrected following application!

Use:
The surface must be clean, dry and grease-free. Clean dirt and oil over a large area from the defective spots with a clean cloth [TexRein, Art. No. 0899 810] and 1A Assembly and Part Cleaner Art. No. 0890 106 500. Select a patch and remove the protective film. Adhere the patch onto the surface without folds, press it firmly into place and hit it using a rubber mallet on a firm surface, if necessary. Attention! – The patch cannot be pulled off and corrected following application!

<table>
<thead>
<tr>
<th>Color</th>
<th>Patch Kit 32pc. ** Art. No.</th>
<th>Patch Kit 500 x 210 mm *** Art. No.</th>
<th>P. Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver 161</td>
<td>0880 600 161</td>
<td>0880 800 161</td>
<td>1</td>
</tr>
<tr>
<td>White 290</td>
<td>0880 600 290</td>
<td>0880 800 290</td>
<td>1</td>
</tr>
<tr>
<td>Ivory 1014</td>
<td>0880 601 014</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Zinc yellow 1018</td>
<td>0880 601 018</td>
<td>0880 801 018</td>
<td>1</td>
</tr>
<tr>
<td>Broom yellow [DHL] 1032</td>
<td>0880 601 032</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pure orange 2004</td>
<td>0880 602 004</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Deep orange 2011</td>
<td>0880 602 011</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Fire red 3000</td>
<td>0880 603 000</td>
<td>0880 803 000</td>
<td>1</td>
</tr>
<tr>
<td>Ultramarine blue 5002</td>
<td>0880 605 002</td>
<td>0880 805 002</td>
<td>1</td>
</tr>
<tr>
<td>Light blue 5012</td>
<td>0880 605 012</td>
<td>0880 805 012</td>
<td>1</td>
</tr>
<tr>
<td>Emerald green 6001</td>
<td>0880 606 001</td>
<td>0880 806 001</td>
<td>1</td>
</tr>
<tr>
<td>Yellow green 6018</td>
<td>0880 606 018</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Light gray 7035</td>
<td>0880 607 035</td>
<td>0880 807 035</td>
<td>1</td>
</tr>
<tr>
<td>Black 9005</td>
<td>0880 609 005</td>
<td>0880 809 005</td>
<td>1</td>
</tr>
</tbody>
</table>

*All colors are similar to RAL; 161 and 290 are manufacturer specifications. **Contents: 3 300 x 200 mm patches, 3 200 x 200 mm patches, 4 300 x 100 mm patches, 4 200 x 100 mm patches, 6 100 x 100 mm patches, 6 200 x 50 mm patches, 6 100 x 50 mm patches. ***Contents: 10 plasters of size 500 x 210 mm.

This information is only a recommendation based on our experience. Preliminary testing required! For further information, see the technical information leaflet.

Additional articles
TexRein Cleaning Cloth Art. No. 0899 810 P. Qty. 1
1A Assembly and Part Cleaner, 500 mL Art. No. 0890 106 500 P. Qty. 1
Rubber Mallet Art. No. 0715 734 08P. Qty. 1