

## CEM805 ONE-COMPONENT ADHESIVE

### MS-Hybrid Polymer Adhesive

#### PRODUCT DESCRIPTION

CEM805 One-Component Adhesive is an odorless adhesive / sealant which reacts with atmospheric moisture to create an elastic vulcanized rubber seal. It is free of solvents, silicones and isocyanates. CEM805 has a neutral cure, is compatible with paints and features excellent chemical resistance.

#### APPLICATION AREAS

One-Component Adhesive CEM805 used as joint sealant and building adhesive.



#### Application examples include:

- 🔒 Excellent adhesion and sealing of metal constructions, roofing, glass-, trailer-, ship- and concrete constructions
- 🔒 Suitable for indoor and outdoor use
- 🔒 Can also be applied to plaster, ceramics, glass, wood, metal and various plastic surfaces as well as galvanized steel and aluminum
- 🔒 Gluing of construction foils
- 🔒 Particularly suitable for materials which require silicone-free sealing and bonding
- 🔒 CEM805 may be used with the following BPA products:  
SilverSeal, DualProof, QUELLMAX, CEMswell, and CEMflex VB Plate

Note: Do not apply on surfaces like bitumen, tar or coatings which can lead to intolerances and plasticizer migration.

#### HOW DOES ONE-COMPONENT ADHESIVE CEM805 WORK?

CEM805 reacts with atmospheric moisture to create an elastic vulcanized rubber seal with an excellent adhesion on most construction materials.

#### CHARACTERISTICS AND ADVANTAGES

- 🔒 Ready for use silicone-, isocyanate- and solvent-free hybrid (MS) polymer adhesive and sealing compound with broad adhesion spectrum
- 🔒 Permanent elastic
- 🔒 Non-corrosive
- 🔒 Odorless
- 🔒 Weather- and ageing resistant
- 🔒 Good UV-resistance
- 🔒 No blistering
- 🔒 May be painted over



**PRODUCT DATA**

	One-Component Adhesive CEM805	Article-No.
Dimensions/ Packaging	290 ml cartridge, 20 units per box Standard colour: white	40-150
	600 ml sausages, 12 units per box Standard colour: white	40-156
Storage	Shelf-life is 9 months when stored free from frost and sunlight in temperatures below +35°C.	

**APPROVALS**

🏠 CE-Certificate

**TECHNICAL DATA**

Material basis	MS-Hybride Polymer
Specific weight	approx. 150 g/cm <sup>3</sup>
Application Temperature (Sealant and substrate)	+5 up to +35°C
Temperature stability range (fully cured sealant)	-40 up to +80°C
Shore A hardness (DIN 53505)	46 ± 5 units
Consistency	stable
Tensile strenght	approx. 2,50 N/mm <sup>2</sup>
Maximum movement tolerance (Herstellerfestlegung)	10%
Skin forming time (23°C/50% r.F.)	approx. 25 min
Cure rate (within first 24 hours)	approx. 3 mm
Colour	White
Density (DIN EN ISO 2811-1)	1,46 ± 0,04 g/cm <sup>3</sup>
Penetration (DIN 51579 / 5 sek.)	190 ± 30 1/10 mm
Slump of Sealants and performance capability / (ASTM 2202)	≤ 2 mm
Tensile strenght (DIN EN ISO 8339-A, 100%)	approx. 1,2 N/mm <sup>2</sup>
Volume loss (DIN EN ISO 10563)	Max. 3%



## **ADDITIONAL INFORMATION**

### **Application CEM805**

#### **Substrate Pretreatment**

The substrate must be dry, firm, and free of dust and grease (clean with isopropanol, if necessary). Porous substrates (e.g. light concrete, plasterboard and untreated wood) must be primed with CEM805 Primer.

Before application of primer, remove any cement slurry, mold release agents, curing agents etc., or any other substances that may inhibit adhesion.

Note: On coated substrates (paints, lacquers), compatibility to the sealant must be tested.

#### **Bonding Applications**

Preferably at least one of the substrates involved should be water-permeable (concrete, wood).

Apply the adhesive as a bead to the substrate, the DFT thickness of adhesive should be at least 2 mm.

If both bonding faces are water-impermeable (metals, plastics), we recommend applying the adhesive in parallel beads, with enough distance to each other to allow enough moisture supply (from ambient air).

#### **Sealing Applications**

The joint must always be provided with a suitable, correctly dimensioned joint backing (e.g. PE cord, rock wool) to prevent adhesion on three faces. To avoid contamination and to achieve a precise joint, we recommend masking the joint edges with adhesive tape before primer application and filling. Joint dimensions should be at least 5 x 5 mm for indoor and 10 x 8 mm (width x depth) for outdoor applications. With increasing joint width (up to 30 mm), joint depth should be roughly half the joint width. Make sure that triangular bevels have uniform sides of equal length with at least 7 mm bonding surface on each side. After applying the sealant with a suitable manual, battery-powered or pneumatic caulking gun, the sealant can be smoothed in the joint with water or with a neutral, non-staining water-based smoothing agent and a suitable tool (e.g. jointing trowel). Smoothing is not only recommended for optical reasons, but also establishes close contact and good adhesion to the substrate. Remove excess smoothing agent. Any adhesive tape used should be removed immediately after smoothing.

#### **Important Remarks**

The function of the sealant can only be guaranteed if correctly applied in accordance with the technical recommendations given in this data sheet and in related standards. Sealant application in situations with strongly fluctuating temperatures (premature stressing of the sealant) must be avoided. The sealant is compatible with many paints and lacquers. Owing to the large number of different coating systems on the market, own tests concerning adhesion and compatibility have to be performed prior to application. For example, it is known that alkyd resin based paints may give discoloration in combination with sealants. Products based on Hybrid- (MS-) technology are overpaintable with many paint systems. Due to the lower movement tolerance of these paints, cracking might occur (not adversely affecting the mechanical properties in most cases). Joints subject to movement must not be overpainted. Especially on powder-coated substrates, adhesion has to be tested carefully, since it can be affected negatively depending on the coating used (may even vary for different colours of the same brand of powder coating).

In contact with bituminous, tar- or plasticizer-releasing substrates (e.g. EPDM, neoprene, butyl), discoloration and/or loss of adhesion may occur. Good ventilation must be provided during application and curing to allow curing by-products to evaporate. Low temperatures, low humidity's and joint depths above 15 mm can retard skin formation and curing significantly.

Exposure to liquid (e.g. acid-based cleaning agents, strongly colored liquids) or gaseous chemicals (e.g. tobacco smoke) for longer periods can result in discoloration of the product, especially for light colors (white). In general, the mechanical properties of the sealant are not adversely affected. For underwater joints, we recommend regular control of pH-value and sufficient maintenance of water quality (oxidation/disinfection, water circulation, regular cleaning). Thus, the risk of contamination with mold can be minimized, but not fully eliminated.

#### **Environment and health**

This product does not represent a hazardous substance within the meaning of the EU Hazardous Substances Regulation. A safety data sheet for transport, placing on the market and use is available on the request.



### **Dangers and Safety**

The essential safety, toxicological, physical and ecological data for the handling of SilverSeal can be taken from the product-specific safety data sheets.

### **Data**

All technical data stated in this product data sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

### **Legal advice**

All above mentioned Information concerning BPA products, especially any recommendations and advices relating to the application and use of BPA products are given in good faith based on BPA's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with BPA's recommendations.

In practice, the differences in materials, actual site conditions and other factors outside are such that no warranty nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered.

The user of the product must test the product's suitability for the intended application and purpose before proceeding with the full application of the products. BPA reserves the right to change the properties of its products without notice.

Users must always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request. All sales of BPA are subject to our current terms and conditions.

### **Local Restrictions**

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local product data sheet for the exact description of the application fields.

