

ALPATEC 171 TRANSP 1 part adhesive and sealant

Description

This is a 1-part, RTV (Room Temperature Vulcanising) silicone adhesive sealant. It is one in a range of Oxime cure products which are solvent free. It exhibits good primerless adhesion to many substrates especially plastics and cures rapidly at room temperature when in contact with atmospheric moisture. This product can be described as low corrosive but would not be recommended for use with copper or its associated alloys.

Key Features

- Adheres to many substrates such as aluminium, non-ferrous metals, steel, glass, glass fabric, ceramics, thermosetting and thermoplastic synthetics, wood and other materials.
- For sealings, elastic bondings and insulations in the industrial field.

Application

For seals and bonds, elastic bonds and insulations in the industrial field. Preparation of Work ALPATEC 171 TRANSP is ready for use and can be processed directly out of the original container without mixing. The substrate must be dry and free from dust and grease as otherwise a reduced adhesion must be expected. In some cases the surface must be pre-treated. Please ask in each individual case.

For degreasing non-porous areas such as e.g. metal and glass we recommend using KÖRASOLV GL (and undyed crêpe paper or similar). Pay attention when cleaning synthetic materials which tend to forming stress cracks, e.g. polycarbonate, polyacrylate. Please check! Vulcanisation (Curing) ALPATEC 171 TRANSP vulcanises under air humidity impact. Low temperatures and a low air humidity retard the curing process, whereas higher values accelerate it. Thicker silicone coats prolong the curing time. The below list shows the curing behaviour of ALPATEC 171 TRANSP at 23 °C and 50 % rel. air humidity. After 1 day : 3 mm and transparent After 2 days : 5 mm and transparent After 3 days : 6 mm and transparent
Seals and bonds with ALPATEC 171 TRANSP must only be mechanically or thermally strained after having completely vulcanised. Solvents and Cleaning Agents For cleaning non-porous surfaces and working devices and for removing fresh compound KÖRASOLV GL is suitable.

Use and Cure Information

This product is a ready for use 1 Part system. If supplied in cartridges it can be applied using either manual or pneumatic dispensing guns. It can also be applied from bulk containers using conventional drum dispensing equipment.

All surfaces to which the sealant is to be applied should be clean, dry and free from grease, dirt, and loose material. Priming of surfaces is not normally required. If using as an adhesive, it should be applied to one clean surface and the other clean surface brought into contact with it within the tack free time stated opposite. For optimum bond strength, the thickness of the sealant joint should be a minimum of 1 mm.

The sealant will cure upon exposure to atmospheric moisture, ideally between 20 to 30 °C and 40% to 70% Relative Humidity. Time taken for cure will depend on the thickness of the joint, humidity and temperature. Joints should be left undisturbed for at least 24 hours, but preferably longer to effect sufficient depth of cure. Full cure requires 7 days.

For pneumatic dispensing of 310 ml cartridges, the recommended pressure is 2.25 to 3.45 bar (40 to 50 psi). Dispensing pressure above the recommended limits may lead to gas bypassing the piston, causing spluttering at the nozzle and poor bead quality.

Health & Safety

Safety

Please observe our EC safety data sheets and the safety remarks on our container labels when handling our products. The dangerous goods regulations and the accident prevention regulations of the professional associations must be particularly observed. Keep the EC safety data sheet of the applied product at hand since it provides you with useful instructions for the safe use and disposal of the product as well as for actions to be taken in case of accidents.

Delivery Units

Upon demand.

Revision Date 29 Apr 2021

Revision No 1

Property

Uncured Product

Property	Test Method	Value
Cure Type		Oxime
Density, uncured	DIN 53 479, 23	1.02 g/cm ³
Self Bonding		Yes

Cured Product

Standard climate DIN 50 014 - 23/50-2. Vulcanizate tested after 14 days

Property	Test Method	Value
Color		Transparent
Elongation at Break	DIN 53 504, S 3 A	600 %
Hardness Shore A	DIN 53 505	18
Hydra expansion value at 100% elongation	DIN 53 504, S 3 A	0.3 N/mm ²
Max Working Temp		160 °C / 320 °F
Min Working Temp		-40 °C / -40 °F
Tensile Strength	DIN 53 504, S 3 A	1.3 N/mm ² / 189 psi

Storage

Shelf Life		9 mths
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CHT make reasonable efforts to ensure that information set out in the technical data sheet is complete, accurate, and up-to-date. CHT do not, however, make any representations, warranties or guarantees (whether express or implied) that information set out in the technical data sheet is complete, accurate, or up-to-date or that the product will be suitable for your requirements. You should carry out your own testing to determine the applicability of such information and whether the product will be suitable. CHT reserve the right to modify the technical data sheet at any time.

The CHT technical service department is available to offer further information and advice and should it be needed to look at modifying current products or custom formulate a new one to meet your specific requirements. Please contact the technical service department.

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