



AP-502 General Purpose Neutral Cure Silicone

Product description

AP-502 is a one-part, neutral-curing, low modulus silicone sealant with outstanding adhesion and long shelf life for construction, perimeter sealing, glazing applications and sanitary areas.

AP-502 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
- solvent-free, thus featuring low volume shrinkage
- 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 (+180 °C)
- excellent weatherability
- excellent tooling characteristics for professional use

Application

- sealing of connecting and expansion joints in the building industry
- glass sealing
- sealing of joints in sanitary areas like e.g. bathrooms and kitchens
- sealing of joints between glazing and supporting structure (frames, transoms, mullions)

Certificates

AP-502 will conform with the following classifications:

- ISO 11600 F+G, class 25 LM
- DIN 18545-2 E
- EN 15651-1 class F-EXT-INT 25 LM

- EN 15651-2 class G-CC 25 LM
- EN 15651-3 class XS1
- EN 15651-4 class PW-EXT-INT-CC 25 LM
- GEV EMICODE EC1-PLUS

Restrictions on use

AP-502 must not be used as a secondary sealant in insulating glass units.

AP-502 is not recommended for structural glazing bonding.

It is the responsibility of the user to test the compatibility of the sealant with the adjoining materials. Incompatible substances like coating materials (paints, varnishes and glazes) or organic plasticizer containing rubbers (EPDM, butyl and neoprene) can lead to discoloration or other impairments like loss of adhesion of the sealant.

Materials in direct contact with the applied sealant like cleaning agents and materials in indirect contact like gaseous emissions can damage the sealant in its function or change its appearance. Because of the multitude of these materials, Titan cannot make a general statement to the compatibility of materials with the sealant. In case of doubt the user shall conduct appropriate preliminary tests.

AP-502 is not suitable for use on natural stones, such as marble, granite, quartzite, as it can cause staining.

AP-502 is not recommended for sealing of aquaria or for the longer-term use under water.

AP-502 is not suitable for food contact applications.

When using AP-502 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. AP-502 is not suitable for use as a mirror adhesive.

The curing time can be extended at lower temperature, lower humidity or by low volume of air exchange.

Adhesion

AP-502 exhibits excellent primerless adhesion to most substrates used in sanitary areas, 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, dust, dirt, rust, oil, and other contaminants. Non-porous substrates should be cleaned with a solvent and a clean, lint-free, cotton cloth. Wipe dry immediately with another such cloth before the solvent evaporates from the surface.

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.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from Titan or may be printed via Titan's web site <http://www.titansc.com>.

Product data

Typical general characteristics	Inspection Method	Value
Unvulcanized paste		
Density at 23 °C	ISO 1183-1 A	1,03 g/cm ³
Consistency	ISO 7390	non-sag
Extrusion rate at 23 °C		200 ml/min
Skin forming time at 23 °C / 50 % r.h.		approx. 25 min
Curing at 23 °C / 50 % RLF		approx. 2 mm/24h
Vulcanized rubber		
After 4 weeks storage at 23°C / 50 % r.h.		
Tensile strength	ISO 8339	0,7 N/mm ²
Elongation at break	ISO 8339	300 %
Modulus at 100 % elongation	ISO 8339	0,35 N/mm ²
Hardness Shore A	ISO 868	22
Movement capability	ISO 9047	25 %
Tear resistance	ISO 34, method C	4,6 N/mm

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



The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

For technical, quality, or product safety questions, please contact:

Titan Distribution, LLC.
22290 Challenger Drive
Elkhart, IN 46514
sales@titansc.com
www.titansc.com