

Technical Data Sheet SiMP Spray Ver. 5.0 March 2021

SiMP Spray

Sprayable, car body repair one-part SiMP elastic adhesive and sealant

DESCRIPTION

SiMP Spray is a sprayable car body repair one component SiMP – Silyl Modified Polymer elastic adhesive and sealant for spray applications in automotive car body repair and industrial assembly. It cures under the influence of atmospheric moisture to form a high performance, permanently flexible elastic adhesive. Solvent and isocyanate free.

AREAS OF APPLICATION

SiMP Spray is a versatile sealant specific for direct spray applications as seam sealer for the reproduction of original marks. Used in overlap or welded joints in the automotive industry and in the construction and repair of coaches and car-bodies, railway carriages, industrial vehicles and containers, it also contributes towards protection against corrosion. Excellent primerless adhesion properties to metals, painted surfaces, aluminum, PVC, fiberglass reinforced plastic, ABS, polycarbonate and plastic materials in general.

FEATURES

- SiMP Silyl-Modified Polymer
- Solvent and isocyanate free, odorless
- Sprayable with specific pneumatic gun; fine and/or heavy finishing can be obtained by regulation of air pressure, distance from joint and product dosage
- The special consistency allows the product to fill even the interstices without running
- Does not run when removing protective masking tape
- Can be used for both internal and under-body applications
- Protects against corrosion
- Vibration and sound damping properties
- Sealing of construction joints and electro-welded sheet metal
- Spot-weldable through before drying
- Easy to gun when used for beading applications
- Can be easily tooled, brushed and smoothed
- Permanently flexible over a wide range of temperatures
- No bubble formation
- Over-paintable with many water and solvent based paints (preliminary tests recommended)
- No Hazard symbol required



TECHNICAL DATA

Appearance	Non-sag thixotropic paste
Color	White, Grey, Black, Beige
Chemical nature	SiMP Silyl-Modified Polymer
Curing Mechanism	Moisture-curing
Curing through volume [mm] (NPT Method 07) (24h - 23°C and 50% RH)	ca. 2.4
Hardness Shore A (DIN 53505)	ca. 45
Density [g/cm³] (NPT method 06) (23°C and 50% RH)	ca. 1.38
Skin time [min] (NPT Method 17) (23°C and 50% RH)	ca. 45
Elastic modulus at 100% [N/mm²] (ISO 37 DIN 53504)	ca. 1.0
Tensile strength [N/mm²] (ISO 37 DIN 53504)	ca. 2.7
Elongation at break [%] (ISO 37 DIN 53504)	ca. 450
Application temperature [°C]	From +5 to +40
Temperature Resistance [°C]	From -40 to +100

APPLICATION

The surfaces to be treated should be perfectly clean, dry and free from dust and grease. It is necessary to treat the bonding surface according to NPT application guidelines, eventually using a specific CLEANER or ACTIVATOR from NPT range. It is advisable to carry out preliminary adhesion tests on the support.

For spray application, use with a dedicated air-pressure gun equipped with a spray regulating nozzle. A smooth spray (orange peel effect) or a more marked effect can be obtained by regulating the nozzle and the air pressure. To better control the spray air flow and therefore the finishing, start form zero pressure and augment to the desired flow. Spray at a distance from 5 to 40 cm from the object. SiMP Spray is a low viscosity thixotropic paste, viscosity value may slightly differ from each batch and according to the residual shelf life. Spraying and finishing tests should be performed beforehand to obtain the desired effect.



SiMP Spray can be over-painted. The paint must be tested for compatibility by carrying out preliminary trials. Attention must be observed with the use of alcohol or alkyd-resin since they may interfere with the curing process of the sealant and reduce the drying time of the paint itself. The hardness and film thickness of the paint may impair the elasticity of the sealant and lead to cracking of the paint film.

Do not cure in the presence of curing silicone sealants. Avoid contact with solvent cleaners during cure. When applying sealant, avoid air-entrapment. Since system is moisture-cured, permit sufficient exposure to air. Bonded elements may require additional holding or support during curing period.

CLEANING OF EQUIPMENT AND PERSONAL PROTECTIVE MEASURES

Clean the tools used with acetone or solvent. When the adhesive has not yet hardened, it can be removed using paper or a cloth. Once hardened, the product can only be removed mechanically. Avoid skin contact by using latex, rubber or polyethylene gloves. If it comes in contact with the skin, remove immediately and wash with soap and water.

PACKAGING

Polietilene cartirdge 290ml – 12 pieces per box

STORAGE AND SHELF LIFE

SiMP Spray can be stored for 12 months in its original packaging (unopened container) between 10°C and 25°C in a cool, dry place. The storage temperature should not exceed 25°C for extended periods of time. Keep away from wet areas, direct sunlight and heat sources.

GENERAL INFORMATION

The information contained in this technical data sheet is to the best of our knowledge correct, being based on our knowledge and experience to date and cannot be used as a guarantee, due to the various different materials present on the market and the fact that the application conditions are not under our direct control and supervision. NPT srl, however, guarantees constant product quality. NPT srl, has the right to modify or up-date this technical data sheet according to requirements. Customers are kindly requested to verify that they are in possession of the latest version.

ALWAYS CONSULT THE MATERIAL SAFETY DATA SHEET BEFORE USING THE PRODUCT