

Teroson SI 33

July 2014

PRODUCT DESCRIPTION

Teroson SI 33 provides the following product characteristics:

Technology	Amine Curing Silicone Rubber
Product Type	Sealant
Application	Assembly
Appearance	Transparent, White, Grey, Black

Teroson SI 33 is a gun-grade, solvent free, one component sealant based on amine curing silicone rubber which cures by reaction with moisture to a soft elastic product.

The skin formation and curing times are dependent on humidity and temperature, and the curing time also depends on joint depth.

By increasing the temperature and moisture these times can be reduced; low temperature as well as low moisture retard the process.

After full curing Teroson SI 33 is odourless, light resistant and demonstrates good adhesion properties and a good chemical resistance.

Due to its curing system, no corrosion in edge areas, as well as on laminated materials is to be expected. When sealing fresh, light coloured paints, a weak yellow colouration can occur during curing.

Application Areas:

- Teroson SI 33 is used for the following applications:
- Sealing aluminium, steel (stainless and stove enamelled) and rigid PVC parapet elements
 - Sealing expansion and butt joints on aluminium facades, rigid PVC frame constructions and in ventilation systems
 - Sealing acrylic glass constructions
 - In machine and apparatus construction: sealing steel to steel, aluminium, plastic, ceramics, glass enamel, e.g. household appliances (refrigerator, dish washer, oven) as well as containers, grinding, drying and washing equipment
 - In the vehicle industry: seam and joint sealing for railway carriages, vehicle build-ups, caravans, buses, tractors, trucks.

TECHNICAL DATA

Density, g/cm ³ :	approx. 1.03
Odour:	of amines, after curing odourless
Consistency:	pasty
Curing mechanism:	humidity curing
Curing system:	amine
Skin formation time (DIN 50014 standard climate), min*:	approx. 10
Cure rate (per 24h) (DIN 50014 standard climate):	approx. 2 mm
Shore-A-hardness (DIN 53505):	approx. 22
Tensile strength (acc. to DIN 53504), MPa:	approx. 1.2
Elongation to break	250

(acc. to DIN 53504)*, %:	
Stress at 100 % elongation (acc. to DIN 53504), MPa:	approx. 0.5
Shear strength (DIN EN 1465), MPa :	approx. 0.6
Volume change (acc. to DIN 52451), %:	max. 5
Permitted permanent movement, %:	25
In service temperature range, °C:	5 to 40
Application temperature, °C:	-40 to 150
Temperature resistance:	
Short exposure (up to 1 h), °C:	200

DIRECTIONS OF USE

Preliminary statement:

Prior to application it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed.

Pre-Treatment:

The substrates must be clean, dry, oil and grease free. For cleaning we recommend Teroson FL and Teroson D.

Application:

Application from 310 ml cartridges is made with the Teroson Hand or Air Pressure Pistols. In the case of compressed air application a pressure of 2 to 5 bar is required, depending on nozzle aperture and speed of application. When applying Teroson SI 33 in closed rooms ensure good ventilation during the curing process.

When using a primer ensure that the joint edges are not primed because discoloration may occur after a period of time.

When sealing butt joints in cold stores and rooms, amine vapours emitted can remain present. It is therefore important to ventilate particularly well during the curing process.

Avoid contact of light coloured Teroson SI 33 with rubber and artificial rubber profiles, as well as bitumen based foams, as discoloration and other damage to the sealant can be caused by extractions from these substrates.

Teroson SI 33 will not adhere to polyethylene, Teflon[®], Hypalon[®] etc. and must not be used for polycarbonate. Plastics not mentioned should be subject to trials before use.

No primer is necessary on glass, fully dried alkyd or synthetic resin paints, glazed ceramics. Metals have to be primed with Teroson SB 450.

CLEANING

Uncured or not fully cured Teroson SI 33 can first be removed by a knife or spatula. The remaining layer can be washed off with Teroson

D or similar products. Fully cured sealant can only be removed mechanically by means of a suitable tool (e.g. sharp blade) or by burning off, for the product is insoluble in all common solvents.

Smoothing

If smoothing of the bead is necessary this has to be done within the skin formation time. Teroson SI 33 can be smoothed with soapy water. Where joint edges have been masked the masking tape has to be removed immediately to avoid tearing of the fresh forming skin.

STORAGE

Frost-Sensitive	No
Recommended Storage Temperature, °C	10 to 25
Shelf-life (in unopened original packaging), 12 months	

ADDITIONAL INFORMATION

Disclaimer:

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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