

# **TEROSON SI 9150**

October 2016

#### PRODUCT DESCRIPTION

TEROSON SI 9150 provides the following product characteristics:

Technology	Neutral curing
Product Type	Sealant
Application	Assembly
Appearance	Black

TEROSON SI 9150 is a solvent free, high viscosity, one-component sealant based on neutral curing silicone rubber which cures by reaction with moisture to a rubber-like firm mass.

Due to the good sag resistance, the product can be applied to both horizontal and vertical surfaces.

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 curing, TEROSON SI 9150 demonstrates excellent resistance against oil and other liquid media during the occuring temperatures.

Both surfaces have full metal-to-metal contact.

Tolerances and surface roughness will be equalised by the pasty sealant which cures to an elastic silicone rubber based gasket: formed-in-place gasket without relaxing which makes any later tightning of the screws unnecessary.

On parts which are only mounted after curing of TEROSON SI 9150 the material acts like a standard gasket also bridging larger tolerances.

# Advantages:

- Because TEROSON SI 9150 gets its final shape only after mating of the surfaces it does not show the typical disadvantages of standard gaskets arising even prior to applicati on:
  - Ageing Contraction Deformation Breaking
- 2. One sealant instead of numerous gaskets simplifies inventory- particularly in the maintenance field.
- 3. Gaskets require a certain thickness, but cannot guarantee a good, effective compression seal despite their thickness and large area if the surfaces are too rough. They rather require additional liquid sealants like Atmosit or others. When using TEROSON SI 9150 the top of the rough metal surfaces have metal-to-metal contact while the silicone sealant solidly fills the low points or voids thus sealing 100%.
- Gaskets will relax eventually causing torque loss. No relaxing with TEROSON SI 9150 because of the metalto-metal contact. Relative movements will be eliminated

by the elasticity.

## **Application Areas:**

TEROSON SI 9150 is used as Formed-in-Place-Gasket (FIPG) for replacing traditional gaskets (e.g. those made from asbestos, paper, rubber, cork, etc.), for sealing jobs with a spacer function or as an ideal seal with optimum surface contact on housings or housing lids, particularly for increased temperatures.

Typical application areas are, for instance, oil pan covers, thermostat housings, valve covers, axle covers, etc.

#### **TECHNICAL DATA**

Color: black Consistency: paste

Density: approx. 1.1 g/cm<sup>3</sup>

Solids: 100 %

Curing mechanism: humidity curing

Curing system: oxime

Skin formation time: approx. 5 to 10 min(s)

(DIN 50014 standard climate: 23°C, 50% rh)

Shore-A-hardness (DIN 53505): ~40

In service temperature range: -40 to 200°C

(depending on medium)

Short exposure (up to 1h): 220°C

# **DIRECTIONS OF USE**

#### **Preliminary Statement:**

Prior to use 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 to be sealed must be clean, dry, oil and grease free; a thin oil film, however, does not interfere the tightness. In most cases wiping off with dry and clean cloth is sufficient.

# Application:

TEROSON SI 9150 is applied as a thin bead to one surface, the other surface is matched and srewed according to regulations.

The sealant is spread by pressing and thus fills all low points whereas some points have metal-to-metal contact.

Finally the sealant film cures to a rubber elastic gasket.

Matching of the parts should occur within 15 minutes unless a



complete curing is desired. Heavier skin formation can cause problems in a tight seal.

Matching of the parts can also be made after curing - assuming an even surface layer. In those cases TEROSON SI 9150 will act as a gasket bonded to the substrate. Parts sealed in such a way can easily be dismounted.

TEROSON SI 9150 can be directly applied from cartidges employing standard air or hand operated guns. TEROSON recommends the use of:

- Teleskop Pistol Power-Line
- Teroson Staku Hand Pressure Pistol

In the case of compressed air application a pressure of 2 - 5 bar is required.

#### Storage:

Frost-Sensitive	No
Recommended storage temperature, °C	15 to 20
Shelf-life (in unopened original packaging), months	12

#### Classification:

Please refer to the corresponding safety data sheets for details on:

Hazardous Information Transport Regulations Safety Regulations Waste Disposal

#### 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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