

## PRODUCT DESCRIPTION

Fasto SM30 is a one-part UL certified, PV Grade, all weather, highly flexible, neutral cure, non-corrosive RTV Silicone Adhesive Sealant. Being non-corrosive, it does not corrode circuit & contacts. It has excellent resistance to weathering, UV Radiation, vibration, moisture, ozone, air borne pollutants, temperature extremes, cleaning detergents, etc. and ensures that it lasts the life of panel. UL File No. **E526945**. Fasto SM30 has **passed RoHS**.

## TYPICAL APPLICATIONS

Fasto SM30 is suitable for bonding & sealing aluminium, glass, plastic & other engineering substrates of Solar Panels. It is its high resilience ensures better expansion & contraction management due to extreme weather conditions. Also, it does not corrode connections in JBs.

## PROPERTIES OF UNCURED MATERIAL \*

	Value
Chemical type	RTV Silicone
Appearance	White, Black
Rheology	Thixo Paste
Specific Gravity (g/ml)	1.46
Skin over time (mins)	08
Full Cure Time (hrs)	24
Extrusion Rate (g/15sec)	30
Shelf life (months)	12

## PROPERTIES OF CURED MATERIAL \*

Appearance	White
Ultimate Tensile Strength (MPa)	2.17
Elongation (%)	385
Operating Temperature Range (Dry Service, °C)	-24 to 212
Hardness (Shore A)	48
Dielectric Strength (KV/mm)	21.4
Volume Resistivity (Ω-cm)	2.73 X10 <sup>15</sup>

\*Skin over time, Full cure time depends upon relative humidity, ambient temp., and surface area.

Testing parameters are arrived after curing for 7 days @ 23 °C / 50% RH, on 2 mm thick sheet. Data obtained as per ASTM, IEC standards.

## TYPICAL ENVIRONMENTAL RESISTANCE

### Hot Strength

Fasto SM30 is suitable for use at temperatures up to 185°C. At 130°C the bond strength will be ~65% of the strength of at 23°C.

### Heat Ageing

Fasto SM30 retains over 96% mass and hardness when heated to 150°C for 10 days, then cooled and tested at 23°C.

### UV Resistance

Fasto SM30 has excellent resistance to UV rays. Fasto SM30 is exposed to UV Light for 21 days. No discoloration / deterioration observed.

## DIRECTIONS FOR USE

Remove all the rust, scale, dirt, dust, grease, oil, release agents, or other contaminants from the surfaces to be bond or sealed. Surfaces can also be cleaned using suitable Fasto cleaner. Apply Fasto SM30 with suitable dispensing equipment and at appropriate pressure for achieving consistent and bubble free continuous bead. Assemble the surfaces immediately to avoid skin over. Apply Fasto SM30 in sufficient quantity and wipe out the excessive quantity with suitable Fasto cleaner.

Fasto SM30 is suitable for gap filling up to 7mm. For sealing large gaps (> 7 mm), use backer rod. or bond breaker tape. Also use masking tape to ensure aesthetically clean & neat joints. Always remove masking tape after tooling and before skinning of sealant.

## LIMITATIONS

Application of Fasto SM30 with below surface conditions must be avoided:

- When surface temperature is higher than 45°C (122°F) or is lower than 10°C (50°F).
- On surfaces that are continuously immersed in water.

- On surfaces that bleed oils, plasticizers or solvents, green or partially vulcanized rubber gaskets or tapes.
- On frost-laden or wet surfaces.
- In totally confined joints (the sealant requires atmospheric moisture for cure).
- If the sealant is intended to be painted (paints do not typically adhere to most silicone sealants).

## GENERAL INFORMATION

### Safety Precautions

Avoid breathing of vapors. Forced local exhaust is recommended to effectively minimize exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions (such as sanding, etc.) may cause high vapor concentrations.

For safe handling and transportation, please consult the Material Safety Data Sheet (MSDS).

For waste disposals, please follow local regulations and consult the Material Safety Data Sheet (MSDS).

### Storage

Optimal storage conditions are between 8°C and 25°C. Storage outside this temperature range can adversely affect product properties and may affect the stated shelf life.

### Packaging

280 ml cartridge, 600 ml sausage  
25 kg pail, 270 kg drum

## DATA RANGES

The data contained in this data sheet may be reported as typical value and/or range. Values are based on actual test data and are verified on a regular basis.

## NOTES

The information contained herein is produced in good faith and is believed to be reliable but is for guidance only. Fasto India and its agents cannot assume liability or responsibility for results obtained in the use of its product by persons whose methods are outside or beyond our control. It is the user's responsibility to determine the suitability of any of the products and methods of use or preparation prior to use mentioned in our literature and furthermore the user's responsibility to observe and adapt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products.

Rev. Doc. No. TSM30R05

Issue Date: 01.04.2024

Next Review Date\*\*: 01.10.2025

\*\*Due to continuous research & development, data review date can be preponed.