HIGH-TEMPERATURE SILICONE

TECHNICAL DATA SHEET

HT300

SILICONE SEALANT · HEAT-RESISTANT

LASICA HT300 — High-Temperature Resistant Silicone Sealant

LASICA HT300 is a one-component, acetic-cure silicone sealant for sealing heating elements, oven gaskets, stoves, chimney filters, industrial furnaces and engine gaskets. Non-sag, it cures at room temperature and stays flexible for years, resisting weathering, UV and intermittent temperatures from −60 °C to +340 °C.

PACKAGING	SHELF LIFE	CURING SYSTEM	TEMP. RANGE
310 ml	18 months	Acetic	−60 → +280 °C

CHARACTERISTICS / ADVANTAGES

- Acetoxy cure system, 100% silicone rubber
- Thixotropic — will not slump, sag or run off
- Stable and flexible −60 °C to +280 °C, short peaks up to +340 °C
- Good resistance to weathering and moisture
- Good resistance to motor oils and some chemicals
- Non-corrosive
- Excellent electrical insulation
- Good adhesion to metal, aluminium, wood, some rubber and plastics

APPLICATION

- Industrial and mining maintenance
- Automotive, marine and general maintenance
- Formed-in-place gaskets (ducting, white goods, electrical sealing, manhole covers, water tanks, piping)
- Sealing of trailers, boats and truck cabs
- Gaskets in heating and refrigeration units
- Bonding and sealing of appliance parts
- Joints in sheet-metal stacks, ductwork and roofing
- High-temperature situations such as fireplace frames

HOW TO USE

A primer may be required on some substrates; consult your supplier. Cut the nozzle to the desired width, cut the tip off the cartridge and attach the nozzle. Apply an even bead ensuring good contact, then tool immediately before the product skins.

1. Ensure that surfaces to be sealed are clean, dry and grease free.
2. The application temperature must be between +5 °C and +40 °C.
3. Tool the bead with light pressure within 5 minutes for a professional finish.
4. Excess uncured sealant may be cleaned with solvent; cured sealant only mechanically.

LIMITATIONS

NOT suitable for the following applications:

- Totally confined spaces where there is no atmospheric humidity, which is needed for curing
- Under-water applications
- Below-grade applications
- Concrete, cement, masonry or stone
- Soft metals such as brass, copper and bronze, as discolouration will occur
- Trafficable surfaces
- Polycarbonate materials, as crazing may occur
- Do not clean or treat the silicone with materials, cleaning agents or solvents that may affect or discolour it, particularly while curing.

PRODUCT DATA

TYPICAL GENERAL CHARACTERISTICS	INSPECTION METHOD	VALUE
PRODUCT DATA (UNCURED)		
Density at 23 °C	ISO 1183-1 A	**1.02 g/cm³**
Consistency	ISO 7390, profile U 20	**Non-sag**
Extrusion rate — volume flow at 23 °C	—	**300 ml/min**
Skin forming time at 23 °C / 50% r.h.	—	**3–6 min**
Curing time at 23 °C / 50% r.h.	—	**3.5 mm/day**
PRODUCT DATA (CURED) — AFTER 4 WEEKS' STORAGE AT 23 °C / 50% R.H.		
Tensile strength	ISO 8339	**0.80 N/mm²**
Elongation at break	ISO 8339	**230 %**
Modulus at 100% elongation	ISO 8339	**0.55 N/mm²**
Hardness Shore A	ISO 868	**35**
Tear strength	ISO 34, method C	**6.1 N/mm**
Combined tension and shear resistance	DIN 32622	**1.6 N/mm²**
Movement capability	ISO 11600	**25 %**

PACKAGING

- Cartridge: **310 ml**

TRANSPORT & STORAGE

- Transport: keep the sealed product away from moisture, sun and high temperature; avoid collisions.
- Storage: keep sealed in a cool, dry place. Temperature 5–25 °C, humidity ≤ 50% RH.
- Shelf life: **18 months** (cartridge, sealed product).

SAFETY

During vulcanization, acetic acid is released. Do not inhale these vapours for long periods or in high concentration; ensure good ventilation of the workplace. In case of contact of uncured silicone with eyes or mucous membranes, rinse thoroughly with water.

STORAGE

The 'best use before end' date of each batch is shown on the product label. Storage beyond that date does not necessarily mean the product is unusable; in this case its properties must be checked before use.

The information in this technical data sheet is based on our experience and testing and is given in good faith for guidance. As conditions of use are beyond our control, the user is responsible for verifying the product's suitability for the intended application through preliminary testing. LASICA accepts no liability for any improper use.