

Description

N-Sil 8101W is a one-part silicone curing at room temperature. It is soft, and it can absorb mechanical shock and vibration. Typical applications include sealing and protection of components on PCBs, reinforcement of FPC, and gap filling etc.

Features

- Recommended substrates: PC, PCB, aluminum, glass
- Fast curing
- Excellent electrical properties
- Soft and flexible
- Excellent resistance to high temperature

Uncured Properties

Chemical Type	Silicone
Appearance	White
Viscosity @ 25°C [mPa·s] Brookfield LVDV, spindle 14# @ 20rpm	1,500
Specific Gravity [g/cm³]	~1.05
Shelf Life @ 10-28°C [months]	6

Curing Conditions

Tack Free [mins] @ 25°C/50%RH	7-15
Curing Speed [mm/24hrs] @ 25°C/50%RH	2.5

Cured Properties

Hardness [Shore A] ASTM D2240	20
Elongation at Break [%] ASTM D638	300
Tensile Strength [MPa] ASTM D638	0.8

Lap Shear Strength [MPa] PCB/PCB ASTM D1002	0.8
Volume Resistivity [ohm-cm] ASTM D257	>2.0x10 ¹⁴
Dielectric Strength [kV/mm] ASTM D14	12
Dielectric Constant @ 60Hz ASTM D150	2.8

Directions for Use

1. Surface Treatment

Surfaces to be bonded should be free of dust, oil, grease or any other contaminants in order to achieve a reproducible bond. For slightly contaminated surfaces, it is sufficient to wipe with isopropanol or ethanol. Substrates with a low surface energy (e.g. polyethylene, polypropylene, Teflon) need to be pre-treated physically (e.g. atmospheric plasma or corona) in order to achieve sufficient adhesion.

2. Application

Products are supplied ready for use. Depending on packaging, it can be dosed manually, semi-automatically or fully-automatically with a dosage apparatus.

This product is cured by reaction with moisture. The tack free and curing time are dependent on humidity and temperature.

3. Suggested working temperature range is -40 to 180°C.

Storage

Maximum shelf life may be obtained when product is stored in a cool, dry location at a temperature between **10°C to 28°C**.

TO PREVENT CONTAMINATION OF UNUSED PRODUCT, DO NOT RETURN ANY PRODUCT TO ITS ORIGINAL CONTAINER.

Materials Handling

This product is slight irritant to eye and skin. In case of eye contact, flush with water for fifteen minutes. Wash with plenty of soap and water after skin contact. If feel uncomfortable, discontinue use and consult a physician.

Refer to the Material Safety Data Sheet (MSDS) for this product.

Disclaimer

The information provided here including the recommendations for use and application of the product is based on internal laboratory test conditions and should only be used as a reference. CollTech does not assume responsibility for the test or performance results obtained by the user. It is the responsibility of the user to perform their own evaluations to confirm whether this product is suitable for their application.