



VITCAS® HEAT RESISTANT SILICONE

TDS4-4

Heat resistant silicone is a high quality, Ready-to-use, single component sealant which with stands very high temperatures.

It has excellent adhesion to most building materials, including:

- glass and glazed surfaces
- enamel
- ceramics
- impregnated and painted wood
- wood
- most plastics

Benefits

- ⇒ **High temperature resistance**
- ⇒ **Excellent adhesion to most building materials**
- ⇒ **Easy application**
- ⇒ **Excellent physical properties: forms a durable, flexible joint, unaffected by exposure to sunlight, snow and ozone and remains resistant for many years**

Typical Applications

Bonding, sealing, assembling and protective coatings of parts used in high temperatures, e.g.:

- kiln tapes, chimney filters and heating units
- engines, power units, coolers and motor pumps
- heating systems
- pumps and motors
- kitchen appliances
- smoke and ventilation ducts



Technical Data:

in the packaged state:

Consistency:	Smooth, stable paste
Curing system:	Acetoxo
Density:	1.03 g/cm ³
Skin formation time:	10 ÷ 15 min.
Curing rate:	3mm/ 24 h, depending on bead thickness, ambient temperature and humidity
Recommended application temperature:	+5°C -> +40°C (curing rate is much slower at minus temperatures)
Available colour:	black

in cured state:

Modulus @ at 100% elongation	0.49 MPa	ISO 8339
Elongation at break	115 %	ISO 8339
Tensile strength at break	0.55 MPa	ISO 8339
Shrinkage	3%	EN ISO 10563:2000
Hardness Shore A	27	
Temperature resistance	-65°C -> +245°C	(up to +315°C for temporary contact)

Standards:

Vitcas® Heat Resistant Silicone meets the requirements of ISO 11600 standard for F&G type, 20HM class sealants.

Application Instruction:

Joint Design: Joint width of **Heat Resistant Silicone** should be 6mm. For joints between 6 and 12mm wide, a seal depth of 6mm is recommended. For joints above 12mm wide, a width to depth ratio of 2: 1 should be used, up to maximum depth of 12mm. In situation where fillet joints are needed, a minimum of 6mm sealant bite to each substrate is recommended. For deeper joints the use of polyethylene or polyurethane foam rod as back-up material recommended.

Surface Preparation – Contact area must be dry, clean, free of dust, oil, grease, bitumen and ice. Metals must be sound. Remove old material residue, especially loose and not sufficiently adhering coatings. Clean and degrease surface with acetone, isopropanol, ethanol (metals, glass) or detergent (plastics). Then dry it. To ensure neat sealant lines mask the areas adjacent to joints with masking tape.

Application – Cut off the top of the threaded adapter. Screw on the nozzle tip and cut off at an angle corresponding to the joint width. Place the cartridge in the gun and inject the joint with the sealant. Apply the material with sufficient pressure to the joint sides to ensure immediate adhesion. The applied sealant should be smoothed immediately following with a wet spatula, jointer or finger (best done with a wooden spatula and soapy water). Remove masking tape right after smoothing.

Cleaning – clean while fresh. After hardening, it can be removed with Silicone remover or mechanically.

Packaging Information

Contents	Packaging	Units per box	Standard units per EUR-pallet
310ml	cartridge	12	1440

Warranted shelf life is 24 months from date of manufacture in unopened, original cartridge, stored at temperatures between 0°C and 25°C in a dry place, protected from freezing.

Transport information:

Road:	ADR:	Free
Sea:	IMDG:	Free
Air:	ICAO / IATA-DGR:	Free
UN Number:		None

Safety and Health Precautions

Apply the usual hygienic measures. For detailed information refer to Material Safety

Data Sheets available upon request from Vitcas Ltd.

Disposal considerations: Product remains and empty cartridges must be disposed of in compliance with official, local regulations.

With the publication of this Technical Information Sheet, previous editions are no longer valid.

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