

RUBBER COMPOUND RANGE

VHTS50-70

High Tear Strength Silicone Rubber

Silicone

High Tear Strength

50-70 Shore A

-55°C to +180°C

Transparent

General Information

VHTS50-70 is a range of high tear strength silicone compounds with very good mechanical properties, available in three hardness grades from 50 to 70 Shore A.

Special features include heat stability inside a wide temperature range. The compound has good flexibility and high transparency, and is easily pigmented to a variety of colours.

POLYMER

Peroxide-cured silicone

HARDNESS RANGE

50-70 Shore A (3 grades)

APPEARANCE

Transparent (pigmentable)

TEMPERATURE RANGE

-55°C to +180°C

Material Compliance

- FDA 21 CFR 177.2600
- EC 1935/2004

A full list of regulatory product information (RPI) is available on request.

Environmental Resistance

Silicone rubber products have an excellent resistance to:

- Ozone
- Cosmic radiation
- Weathering in general
- Oxidation
- Ionising radiation
- Corona discharge
- Ultraviolet light

Typical Applications

- Dairy & food applications
- General automotive parts
- Sanitary
- E-mobility cables for EV/HEV
- Ignition & battery cables
- Vibration damping
- Exhaust-pipe suspensions
- Profiles and tubing

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Technical Data

Cure conditions: 1.5% (50% paste of bis (2,4-dichlorobenzoyl)-peroxide in silicone fluid), 10 min / 135°C in press, post-cured 4 h / 200°C.

Property	Units	VHTS50	VHTS60	VHTS70	Test Method
Appearance	–		Transparent		–
Temperature range	°C		-55 to +180		–
Hardness	Shore A	52	62	72	DIN ISO 48-4
Density	g/cm ³	1.15	1.17	1.19	DIN EN ISO 1183-1 A
Tensile strength	N/mm ²	10.0	11.0	10.0	ISO 37 type 1
Elongation at break	%	600	660	570	ISO 37 type 1
Tear strength	N/mm	39	43	45	ASTM D 624 B
Compression set (1) 22 h 175°C	%	31	25	38	DIN ISO 815-1 type B method A
Rebound resilience	%	48	46	47	ISO 4662

These figures are only intended as a guide and should not be used in preparing specifications.

(1) Post-cured 4 h / 200°C. Size tolerance to ISO 3302-1: 2014.

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