Technical Information

TEGOSIL® HT Series

TEGOSIL® HT series includes the products TEGOSIL® HT 2000 and TEGOSIL® HT 2100, which are special bases to improve heat transfer properties of cured silicone elastomers especially such as high consistency rubber materials.

Physical properties

	TEGOSIL® HT 2000	TEGOSIL® HT 2100
Delivery form	white viscous paste	white viscous paste
Density	approx. 1.5 g/cm³	approx. 1.5 g/cm³

Application

TEGOSIL® HT series are used as heat transfer base for industrial articles and consumer goods based on peroxide and addition curing rubber materials.

Properties

The table below shows the thermal conductivity of a typical 50 Shore A HCR compound cured with 1.5 % 2,4 dichlorobenzoyl peroxide (50 % active content) at different temperatures.

Dosage

TEGOSIL® HT can be used on the double roll mill, during compounding or in a kneader together with a HCR base material. A good distribution of the product is required.

To achieve a 50–250 % higher thermal conductivity compared to a standard HCR compound, TEGOSIL® HT series is typically used with 35 % to 70 %. This corresponds to 100 parts HCR base mixed with 50–230 parts TEGOSIL® HT series (corresponding with 35 to 70 %)

	Thermal Conductivity [W/mK]			
	RT	50 °C	100 °C	150 °C
HCR rubber without additive	0.24	0.24	0.23	0.22
+ 45 % TEGOSIL® HT 2000	0.40	0.40	0.37	0.34
+ 55 % TEGOSIL® HT 2000	0.45	0.45	0.41	0.38
+ 70 % TEGOSIL® HT 2000	0.54	0.53	0.49	0.44
+ 45 % TEGOSIL® HT 2100	0.40	0.40	0.37	0.35
+ 55 % TEGOSIL® HT 2100	0.45	0.45	0.42	0.38
+ 70 % TEGOSIL® HT 2100	0.53	0.54	0.50	0.45

Vulcanisation conditions

5 min. at 116 °C. Post curing: 4 h at 200 ° C.

Registration

TEGOSIL® HT 2000 and TEGOSIL® HT 2100 listed in the following chemical inventories:

EINECS, TSCA, DSL, ENCS, AICS, ECL, PICCS, IECSC, NZIOC, NECSI

Based on the submitted information of our raw material suppliers we can confirm, that TEGOSIL® HT series is compliant with EC Regulation 1907/2006 (REACh).

Storage Stability

TEGOSIL® HT 2000 and TEGOSIL® HT 2100 are stable for minimum 24 months in original packaging at temperature below 30 °C.

Packaging

20 kg
250 kg steel drum

Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicity and ecological effects

is given in our material safety data sheets.

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