Product Information

TEGOSIL® Heatban 100

PRODUCT DESCRIPTION

TEGOSIL® Heatban 100, 110 and 200 are heat stabilizers for cured silicone elastomers and in particular used for high consistency rubber. The TEGOSIL® Heatban 100, 110 and 200 protects the compound specific properties from thermal degradation up to 300°C.

Typical Properties

Property	Unit	Value
Color		white
Density	g/cm³	0.98-1.02
Product Form		creamy paste

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

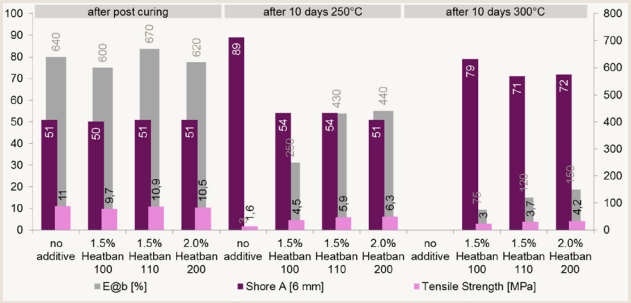
TEGOSIL® Heatban 100, 110 and 200 are suitable for a variety of peroxide and platinum cured rubber materials for industrial articles and consumer goods. Due to the viscosity (pasty) the materials can be easily incorporated in HCR.

TEGOSIL® Heatban added to the silicon elastomer compound gives a safety heat protection up to 300°C. Even long-term heat protection at 300°C up to 30 days can be achieved, in particular by TEGOSIL Heatban 200.

The TEGOSIL® Heatban series for HCR is in general also suitable for LSR. However, the products will be supplied as lower viscose versions available on request. Dosage recommendations will be given together with the samples since it depends on the required viscosity of the material to be applicable in the chosen process.

BENEFITS & ADVANTAGES

- Easy to handle heat stabilizer concentrat for HCR formulations
- White apperance gives freedom for customized coloration
- Highest performance (max. heat resistance; min. heat aging)
- Lowest dosage and cost
- Lowest influence on mechanical properties
- Lowest viscosity = best incorporation, processability and precision



DOSAGE

The dosage recommended for a first trial is given in the table below. I varies depending on the TEGOSIL® Heatban grade. Furthermore, a standard dosage range is given, respectively.

	TEGOSIL® Heatban 100	TEGOSIL® Heatban 110	TEGOSIL® Heatban 200
Appearance			
Form	creamy paste	creamy paste	high viscous paste
Color	white	off white	brownish
Density	~ 1.00 g/cm³	~ 1.23 g/cm³	~ 1.00 g/cm³
Dosage/Recommendation			
Standard dosage	1.2. - 2.0 %	1.3 - 2.0 %	2.0 - 3.0 %
Dosage for 1st trial	1.5 %	1.5 %	2.0 %
Transparent HCR	suitable	suitable	-
Colored HCR	suitable	suitable	suitable

HANDLING & PROCESSING

TEGOSIL® Heatban grades can be used on the double roll mill, during compounding or in a kneader. A good distribution of the product is required.

The mechanical properties of a typical black colored 50 Shore A HCR compound cured with 1.5% of 2,4 dichloro-

benzoyl peroxide (50% active content) containing TEGOSIL® Heatban are illustrated in the diagram on the following page.

Vulcanisation conditions

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

Thermal aging: 10 days at 250°C or 300°C.

PACKAGING

20 kg plastic drum

SHELF LIFE

TEGOSIL® Heatban grades are stable for minimum 24 months in original packaging at a temperature below 30°C.

HAZARDOUS SUBSTANCE

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.

REGISTRATION LISTING SUMMARY

The relevant components of TEGOSIL® Heatban 100, 110 and 200 are listed/registered or exempt in the following chemical inventories.

Based on the submitted information of our raw material suppliers we can confirm, that TEGOSIL® Heatban 100, 110 and 200 is compliant with EC Regulation 1907/2006 (REACh).

Registration Listings	
Registry	**Status**
Australia (AICIS)	Yes
Canada (DSL)	Yes
China (IECSC)	Yes
EU (REACH)	Yes
European Union (EINECS/ELINCS)	Yes
Japan (ENCS)	Yes
Korea (KECL)	Yes
New Zealand (NZIoC)	Yes
Philippines (PICCS)	Yes
United States of America (TSCA)	Yes

FOOD CONTACT COMPLIANCE

BfR XV

TEGOSIL® Heatban 100, 110 and 200 complies with BfR-Recommendation XV-Silicones, III. Silicone elastomers (rubber); the silicone elastomers must release no more than 0.5% volatile organic and no more than 0.5% extractable components. The finished products must not test positively for peroxides.

There is no harmonized EU-legislation for silicones. Information concerning other national regulations can be given on request.

FDA

TEGOSIL® Heatban 100, 110 and 200 may be used in accordance with 21 C.F.R. § 177.2600, Indirect Food Additives: Polymers, Rubber articles intended for repeated use.

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