

Product Information

TEGOSIL® Heatban 400 Conc

PRODUCT DESCRIPTION

TEGOSIL® Heatban 400 and TEGOSIL® Heatban 400 Conc are heat stabilizers developed for liquid silicone rubber applications protecting compounds' specific properties from thermal degradation up to 300°C (see graphic below).

Typical Properties

Property	Unit	Value
Product Form		Creamy liquid paste
Viscosity	mPa·s	10000

The data represents typical values (no product specification)

Viscosity

TEGOSIL® Heatban 400	~ 5 000 mPas
TEGOSIL® Heatban 400 Conc	~ 10 000 mPas

TYPICAL APPLICATIONS

Both TEGOSIL® Heatban 400 grades are heat stabilizers for industrial articles and consumer goods based on liquid silicone rubber. Both products give a safety heat protection up to 300°C.

Especially automotive sealants made from LSR in multiple colors take advantage from the use of TEGOSIL® Heatban 400 products to gain long-term resistance against elevated temperature in underhood applications.

TEGOSIL® Heatban 400 and TEGOSIL® Heatban 400 Conc are also used for platinum catalysed HCR applications and in peroxide cured HCR for long-term automotive or cable applications having a need for heat stabilization (200-230°C) for 1000-3000 h.

The mechanical properties of a typical ready-to-use liquid silicone rubber (Shore 50 A) with 3.0% TEGOSIL® Heatban 400 before and after a heat aging are illustrated in the diagram. Using 2.0% of TEGOSIL® Heatban 400 Conc gives comparable or even better results.

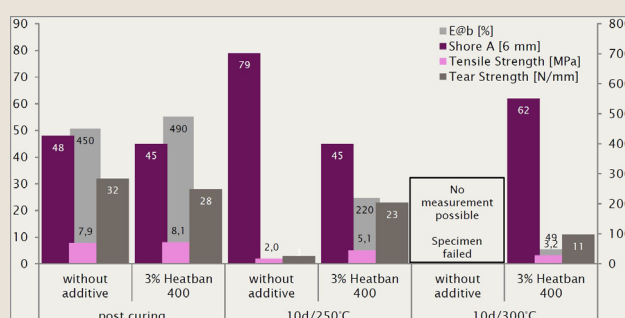
BENEFITS & ADVANTAGES

- Easy to handle heat stabilizer concentrat for LSR formulations
- White masterbatch 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

Both products just differentiate in the dosage required. TEGOSIL® Heatban 400 is typically applied with a dosage between 2.5% to 3.5%. For a first trial 3.0% is considered as the most promising concentration.

TEGOSIL® Heatban 400 Conc is typically applied with a dosage between 1.5% to 2.0%, whereas a dosage of 2% is recommended for a first trial.



HANDLING & PROCESSING

TEGOSIL® Heatban 400 and TEGOSIL® Heatban 400 Conc can be formulated into the ready-to-use LSR compound or they can be applied via the dosing unit of the injection moulding machine.

Vulcanisation conditions

10 min. at 170°C. Post curing: 4 h at 200°C.

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

PACKAGING

20 kg

SHELF LIFE

TEGOSIL® Heatban 400 and TEGOSIL® Heatban 400 Conc are stable for minimum 12 months at temperatures below 25°C in the original packaging. After a longer time of storage, the product has to be stirred to avoid any minor differences in performance due to slight separation that may appear.

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

Based on the submitted information of our raw material suppliers we can confirm, that TEGOSIL® Heatban 400

Conc are compliant with EC Regulation 1907/2006 (REACH).

The relevant components of TEGOSIL® Heatban 400 Conc are listed/registered or exempt in the following chemical inventories:

Registration Listings

Registry	Status
Australia (AIIC)	Yes
Canada (DSL)	Yes
China (IECSC)	Yes
EU (REACH)	Yes
European Union (EINECS/ELINCS)	Yes
Japan (ENCS)	Yes
South Korea (KECL)	Yes
New Zealand (NZIoC)	Yes
Philippines (PICCS)	Yes
United States of America (TSCA)	Yes
Vietnam (NCI)	Yes

Disclaimer

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