

Product Information

TEGOSIL® Heatban 400

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	4000-6000

The data represents typical values (no product specification)

Viscosity	~ 5 000 mPas
TEGOSIL® Heatban 400	~ 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.

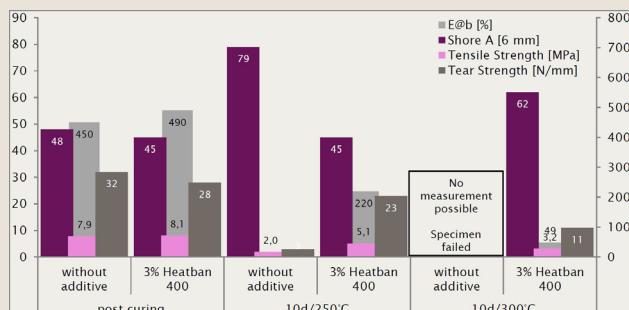
Especially automotive sealants made from LSR in multiple colors take advantage from the use of TEGOSIL® Heatban 400 products to gain long-term resistance against elevated temperature in underhood applications.

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.

TEGOSIL® Heatban 400 Conc are 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
Vietnam (NCI)	Yes

REGISTRATION LISTING SUMMARY

The relevant components of TEGOSIL® Heatban 400 and TEGOSIL® Heatban 400 Conc 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 400 and

Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

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