

Technical Information

# TEGOSIL® Heatban 400 and TEGOSIL® Heatban 400 Conc for LSR

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).

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.

Physical properties	
Delivery form	Creamy liquid paste
Viscosity	
TEGOSIL® Heatban 400	~ 5 000 mPas
TEGOSIL® Heatban 400 Conc	~ 10 000 mPas

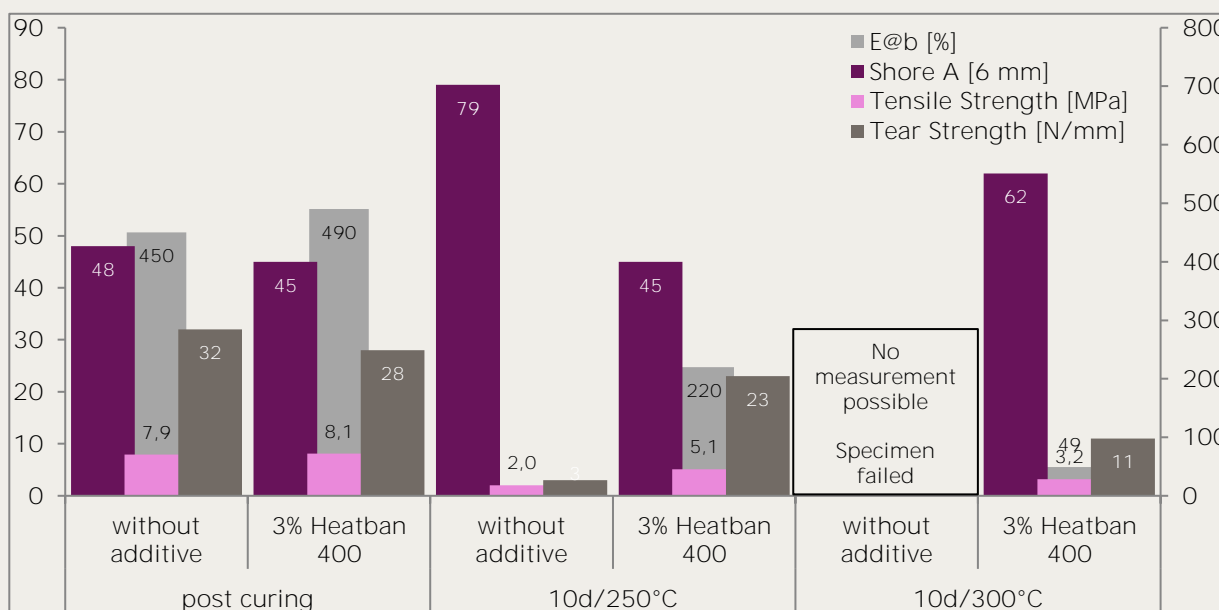
TEGOSIL® Heatban 400 and TEGOSIL® Heatban 400 Conc are also used for platinum catalysed HCR applications and in peroxide cured HCR for long-term automotive or cable applications having a need for heat stabilization (200–230 °C) for 1000–3000 h.

### Application

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.

### Properties

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.



## Dosage

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.

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.

## Vulcanisation conditions

10 min. at 170 °C. Post curing: 4 h at 200 °C.  
Thermal aging: 10 days at 250 °C or 300 °C

## Registration

TEGOSIL® Heatban 400 and TEGOSIL® Heatban 400 Conc are 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® Heatban 400 and TEGOSIL® Heatban 400 Conc are compliant with EC Regulation 1907/2006 (REACH).

## Storage

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.

## Packaging

20 kg

## 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

are given in our material safety data sheets.

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