Technical Data Sheet

LOCTITE® NS 5540

October 2020

PRODUCT DESCRIPTION

LOCTITE® NS 5540 provides the following product characteristics:

Technology	Sealant
Chemical Type	Thermally reactive resin
Appearance (uncured)	Brown liquid
Components	One component - requires no mixing
Viscosity	Low
Cure	Heat Cure
Application	Sealant for thread and flange
Specific Benefit	Chemical Resistant

LOCTITE® NS 5540 is a one component, thermally reactive liquid sealing compound that is designed for high temperature and high pressure applications. In the presence of heat, LOCTITE® NS 5540 will cure to form a seal. LOCTITE® NS 5540 will not permanently join the flanges together, it will not interfere with future repairs of metal-to-metal joints. This product is typically used at temperatures up to 700°C (1,300°F) and seals up to 200 bar (2,900 psi) with correctly designed flanges. Typical applications include high temperature thread flange sealing of steam, oils, hot air, and exhaust gases.

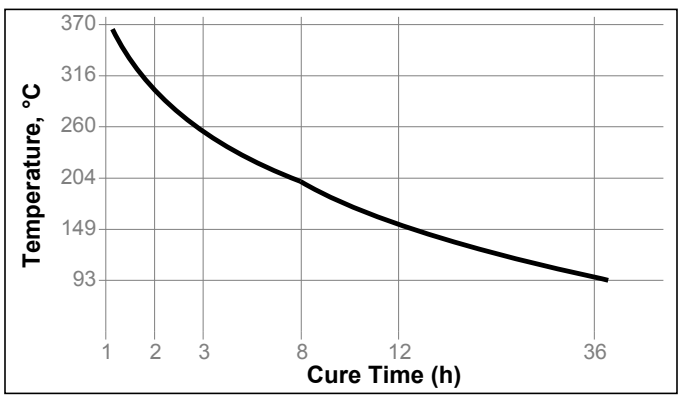
TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 23°C	0.97
Viscosity, Brookfield – DV-E, 25°C, mPa·s (cP)	48,000

TYPICAL CURING PERFORMANCE

Cure Speed

The rate of cure will depend on temperature. The graph below shows the cure time at different temperature.



TYPICAL PERFORMANCE OF CURED MATERIAL

Cured for 3 hours @ 260°C

Adhesive Properties

Breakloose Torque, Pre-torqued to 290 N·m:

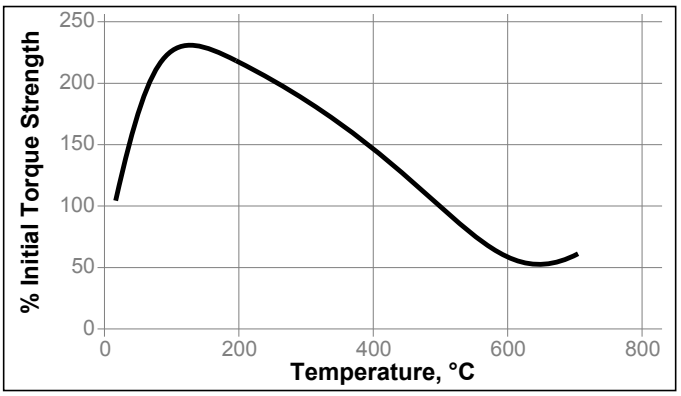
ISO 10964, 1.25-inch B-7 Bolt	N·m	220
	(lb.in.)	(2,000)

TYPICAL ENVIRONMENTAL RESISTANCE

Cured for 3 hours @ 260°C

Heat Aging

Aged for 1 day at temperature indicated and tested @ 23°C, ISO 10964



Chemical/Solvent Resistance

The following table shows chemical resistance relative to MILS-15204D % SOLIDS. Aged for 1 day and tested under conditions indicated.

Sodium hydroxide, 10%	80°C	Pass
Water/Steam, 100%	107°C	Pass
Steam, 100%	370°C	Pass
Isopropanol, 100%	80°C	Pass
ISOPAR M, 100%	80°C	Pass
Transmission Fluid, 100%	107°C	Pass

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions For Use:

Application

1. For best results, clean all surface (external and internal) with a LOCTITE® cleaning solvent and allow to dry.
2. Apply an even coating across the entire surface to be sealed with a brush or putty knife (apply to male end of threads).
3. Product may be used with existing gaskets as a dressing. In this case apply a thin coat to both sides of the gasket as well as the mating surfaces.
4. Normal bolting and torque procedures should be followed when assembling the joint, follow manufacturer's specifications where required.

Curing

1. High pressure applications or pressure testing at ambient require running heat without pressure or pre-curing with an external heat source .

Clean-up

1. Immediately after use clean tools with suitable cleaner, e.g. LOCTITE ® SF 7070 or a solvent such as acetone or isopropyl alcohol. Once cured, the material can only be removed mechanically

Storage
Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.
Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.
Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Product Specification
The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and Certificate
Please contact your local Henkel representative for related approval or certificate of this product.

Data Ranges
The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23°C/50% RH = 23±2°C/50± 5% RH.

Conversions
(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Disclaimer
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.
Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:
In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.
Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation or Henkel Canada, Inc.the following disclaimer is applicable:
The data contained herein are furnished for information only

and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage
Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.2

This document was created and digitally signed by tdx.henkel.com at 2025-11-27T05:31:11.939Z