Technical Data Sheet

LOCTITE® 128068™

March 2015

PRODUCT DESCRIPTION

LOCTITE® 128068™ provides the following product characteristics:

Technology	Acrylic
Chemical Type	Methacrylate ester
Appearance (uncured)	Purple paste[LMS]
Fluorescence	Positive under UV light[LMS]
Components	One component - requires no mixing
Viscosity	High
Cure	Anaerobic
Application	Sealing

LOCTITE® 128068™ is a ready-to-use, one component, gel-like anaerobic flange sealant that cures at room temperature when it is isolated from air contact. However, it is designed to cure slowly to avoid shimming between flanges. LOCTITE® 128068™ seals close fitting joints between rigid metal faces and flanges and will flex with minor flange movements. Provides resistance to low pressures immediately after assembly of flanges. Typically used as a form-in-place gasket for transmission housings and axle covers.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C 1.1

Flash Point - See SDS

Viscosity, Brookfield - HBT, 25 °C, mPa·s (cP):
Spindle TB, speed 0.5 rpm, Helipath 300,000 to 1,000,000[LMS]

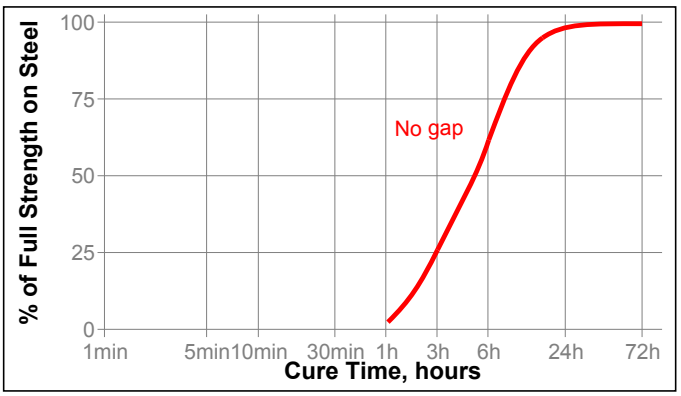
TYPICAL CURING PERFORMANCE

Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. An ambient temperature product should not begin to cure for at least 30 minutes on steel.

Cure Speed vs. Bond Gap

The rate of cure will depend on the bondline gap. This product is not designed to be used on flanges with gaps in excess of 0.1 mm.



TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties:

Coefficient of Thermal Expansion, ISO 11359-2, K^{-1}	80×10^{-6}
Coefficient of Thermal Conductivity, ISO 8302, W/(m·K)	0.1
Specific Heat, kJ/(kg·K)	0.3

TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

After 24 hours @ 22 °C

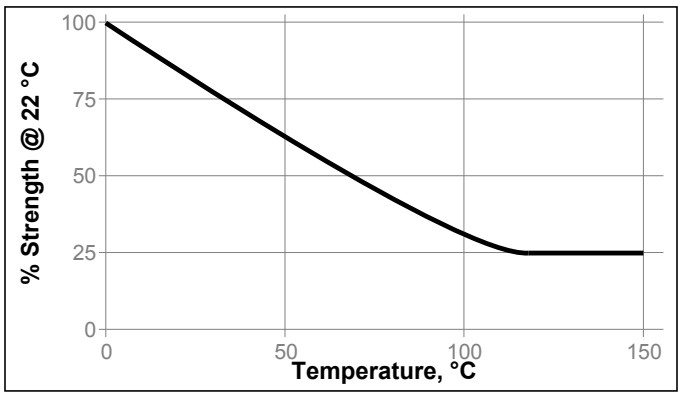
Compressive Shear Strength, ISO 10123:		
Steel pins and collars	N/mm² (psi)	≥5.0[LMS] (≥725)
Lap Shear Strength, ISO 4587:		
Steel (grit blasted)	N/mm² (psi)	6 (870)
Tensile Strength, ISO 6922:		
Steel (grit blasted)	N/mm² (psi)	14 (2,030)

TYPICAL ENVIRONMENTAL RESISTANCE

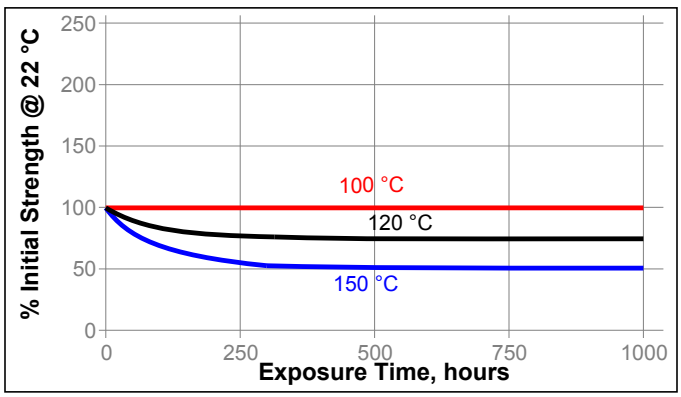
Cured for 1 week @ 22 °C

Lap Shear Strength, ISO 4587:
Steel (grit blasted)

Hot Strength
Tested at temperature



Heat Aging
Aged at temperature indicated and tested @ 22 °C



Chemical/Solvent Resistance
Aged under conditions indicated and tested @ 22°C.

		% of initial strength	
Environment	**°C**	**500 h**	**1000 h**
Motor oil	125	160	165
Gasoline	22	20	15
Water/glycol 50/50	87	80	80

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).

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure and performance of the adhesive.

This product is not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). Users are recommended to confirm compatibility of the product with such substrates.

Directions for use:

1. For best performance bond surfaces should be clean and free from grease.
2. The product is designed for close fitting flanged parts with gaps up to 0.1 mm.
3. Apply manually as a continuous bead or by screen printing to one surface of the flanges.
4. Low pressures (<0.05 MPa) may be used when testing to confirm a complete seal immediately after assembly and before curing.
5. Flanges should be tightened as soon as possible after assembly to avoid shimming.

Loctite Material Specification[LMS]
LMS dated August 23, 2004. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

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 Technical Service Center or Customer Service Representative.

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

injury caused by our negligence and any liability under any applicable mandatory product liability law.

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Reference 0.2