

LOCTITE® AA 5885

August 2024

Product description

LOCTITE® AA 5885 provides the following product characteristics:

Technology	Cured-In-Place Gasketing
Chemical Type	Polyacrylate (ACM)
Appearance	Clear liquid
Cure	Ultraviolet (UV) light
Thixotropy index	6.1
Batch data	D522301471 D512008960 D525009014 D525009015 D530404781

LOCTITE® AA 5885 is a single component, UV curable liquid elastomer designed for cure-in-place gasketing (CIPG) applications. Once cured with a short exposure to high intensity UV light the gasket can be compressed immediately. The resulting gasketing material can withstand service up to 150°C in a dry or high humidity environment.

Application

Static compression gasket applications for electronic components. Example applications are electrical control module housings, battery packs, fuse boxes, actuators, invertors, and sensing systems.

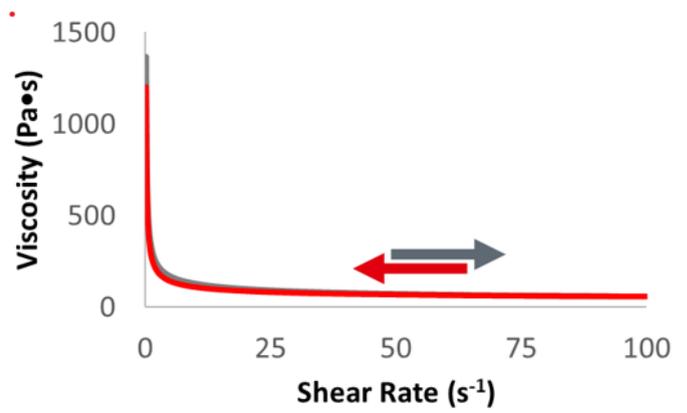
Typical properties of uncured material

Chemical Type	Polyacrylate
Appearance	Clear pink viscous paste
Specific gravity @ 25°C	1.07
Solids/non-volatile content, %	76
Flash point, °C	95
Boeing Flow, ASTM D2202, mm/15 min.	2.9
Extrusion rate, g/min 90 psi, 10s, 25°C, Semco #440 nozzle	>200
Aspect ratio, Pressure dispense, 30 s	0.90
Aspect ratio, Pressure dispense, 5 min	0.86
Aspect ratio, Gear pump, 30 s	0.70

Parallel plate viscosity, BS 5350 B8

@ 0.5 s ⁻¹ , Pa•s	800-1500
@ 0.5 s ⁻¹ , Pa•s	100-200
Thixotropy index	>6

The following graph shows that as shear rate is increased the viscosity of the material decreases to permit flow and rapid processing. Once the shear stress is removed the viscosity recovers, which allows for high-aspect ratio beads to be attained.



Curing performance

Hg-Arc Depth of Cure, mm 70 mW/cm ² , measured @ 70 mW/cm ² for 60 s	13
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Typical properties of cured material

Hg-Arc cured for 60 s @ 70 mW/cm ² , measured @ 365 nm	
Shore hardness, ISO 868, Shore A	25-30
Tensile strength, ISO 37, MPa	1.8-2.5
Elongation at break, %	200-300
Modulus at 50%, MPa	0.35
Water absorption, ISO 62, % 24 hours in water @ 23°C	0.4

Compression set

ISO 815, Method B, 72 hr Air, 2 hr cold release 25 % compression, 150°C	25%
ISO 815, Method B, 168 hr Air, 2 hr cold release 25 % compression, 150°C	24%
50 % compression, 150°C	30%

Adhesive properties

Lap shear strength ISO 4587

Hg-Arc 70 mW/cm², measured @ 365 nm for 30 s

Al Clad	0.44 MPa	0% c.f.
30% GF PBT	0.25 MPa	0% c.f.

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 Material Safety Data Sheet.

Direction for use

This product is UV light sensitive: exposure to daylight, UV light, and artificial lighting should be kept to a minimum during storage and handling.

Storage

Store product in the unopened container in a dry location. Shelf-life (in unopened original packaging), 12 months. Storage information may be indicated on the product package labeling.

Optimal Storage: 8°C to 28°C. Storage below 8°C or greater than 28°C can adversely affect product properties.

Do not return unused product to the original container. Material cures when exposed to light. Minimize exposure to all light sources. 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.

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.

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

Additional information**Disclaimer**

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