

LOCTITE® AA 5884

November 2023

PRODUCT DESCRIPTION

LOCTITE® AA 5884 provides the following product characteristics:

Technology	Cured-In-Place Gasketing
Chemical Type	Polyacrylate
Appearance	Pale yellow transparent paste
Components	One-component
Cure	Ultraviolet (UV) light
Application	Gasketing and sealing

LOCTITE® AA 5884 is a UV/Visible light curing, liquid elastomer designed to be cured into a compression gasket directly on the part. After curing by UVA-light, LOCTITE® AA 5884 will have a tacky surface. This tackiness can be avoided by using Hg mercury ARC-lamps. The dispensed and cured bead of LOCTITE® AA 5884 will moderately adhere to the part and can be removed for rework purpose. Once cured with a short exposure to a high intensity UV light source, the oil and thermally resistant gasket can be compressed. This product can be used in static compression gasket applications for automotive power train and related components. Typical applications include cam covers, oil pans, rear seal retainers, transmission covers, axle covers and module housings. LOCTITE® AA 5884 is halogen free and is resistant against hydrolysis. Flame resistance tested in accordance to UL94 HB.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.13
Flash Point (°C)	>93
Boeing Flow (inch/2 min.)	0
Viscosity, Plate to Plate, 0.5 mm, 23 °C:	
at 0.5 (1 /s) Pas	945
at 5 (1 /s) Pas	243

TYPICAL CURING PERFORMANCE

UV Depth of cure, mm >5

30 s @270 mW/cm² (whole spectrum), 365 nm and 275nm absorption maximum of photoinitiators

TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 30 s per side @ 270 mW/cm² (whole spectrum), 2 mm thick film. 365 nm and 275 nm absorption maximum of PIs.

Physical Properties

Shore Hardness, ISO 868 Durometer A	55 to 65
Elongation, at break ISO 37, %	~200
Tensile Strength, ISO 37 (N/mm ²)	>4
Tensile Strength, ISO 37 (psi)	(>725)

Physical Properties after 1000 hour

Immersion in ASTM SF 105 Oil @ 150°C:

Shore Hardness, ISO 868 Durometer A	50 to 70
Elongation, at break, ISO 37,%	>100
Tensile Strength, ISO 37 (N/mm ²)	>3
Tensile Strength, ISO 37 (psi)	(>435)
Volume change, %	<10

Physical Properties after 1000 hour

Immersion in Dexron VI ATF @150°C:

Shore Hardness ISO 868, Durometer A	50 to 70
Tensile Strength, ISO 37 (N/mm ²)	>3
Tensile Strength, ISO 37 (psi)	(>435)
Elongation, at break, ISO 37, %	>100
Volume Change %	<10

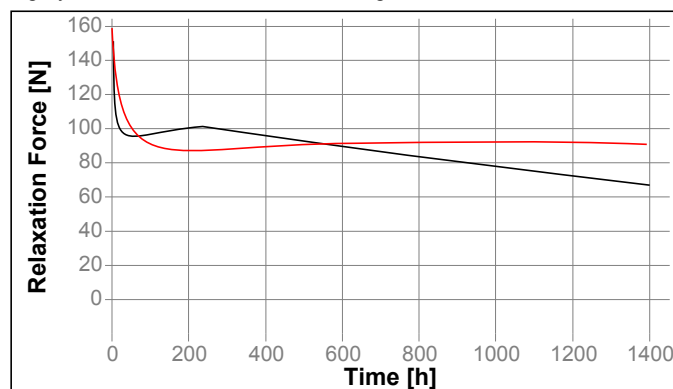
Compression Stress Relaxation, ASTM D6147

Cured for 60 s per side @ 70 mW/cm², 365nm and 275 nm absorption maximum of PIs.

Aged @ 150°C, Dyneon fixture, 25% initial compression

red curve: LOCTITE® AA 5884 - Engine oil - 135°C

grey curve: LOCTITE® AA 5884 - Engine oil - 150°C



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

- For best performance flange surfaces should be clean and free from grease, oil and dirt.
- The product is designed for close fitting flanged parts and flanged parts with torque limiters.
- To obtain best results, each application should be evaluated under the specific conditions anticipated for performance and durability of the parts.
- The warpage of plastic parts and flatness deviation should be controlled to nil/minimum for effective sealing.
- Consult with Henkel Technical team for optimum sealant usage and best performance on specific groove dimensions.

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 28°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.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\mu\text{m} / 25.4 = \text{mil}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{N/mm}^2 \times 145 = \text{psi}$

$\text{MPa} \times 145 = \text{psi}$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

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Reference 2

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