Preliminary - Technical Data Sheet

LOCTITE® AA 5820™

Known as LOCTITE® 5820™
August 2021

PRODUCT DESCRIPTION

LOCTITE® AA 5820™ provides the following product characteristics:

Technology	Formed-In-Place Gasketing
Chemical Type	Polyacrylate
Appearance (uncured)	Dark grey paste[LMS]
Components	One component - requires no mixing
Cure	Moisture cure
Application	Sealing
Specific Benefit	• Superior hot oil resistance • Joint movement tolerant • Non sagging

LOCTITE® AA 5820™ is a single component, non-silicone, oxime-free, polyacrylate based adhesive/sealant that cures with moisture at room temperature. It is designed with a heavy body viscosity for on line, low air pressure tests to be carried out before product begins to cure. The non-silicone based resin does not promote foaming in lubricants and exhibits excellent resistance to powertrain fluids. LOCTITE® AA 5820™ is primarily designed for flange sealing with excellent oil resistance and is non-permeable to hydrocarbons. . It also shows compatibility with almost all Gap Fillers of The Bergquist Company. . Typical applications include cast metal, stamped steel, and molded plastic covers for engines, transmissions and axles. This product also works well for sealing plastic and metal housings on electronic components.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 20°C: g/cm³	1.29 to 1.37
Extrusion Rate @ 6.2 bar, 3.2 mm, g/min:	20 to 60
Skin Over Time, minutes	25 to 45
Cure rate, mm/24h	3

TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 1 week @ 25°C / 50±5 % RH

Physical Properties:

Hardness (Shore A)	25 to 35
Tensile Strength MPa	1.3
Elongation, at break, %	>175
Alclad lap shear, MPa	0.8 (1w)
Alclad lap shear, MPa	>1.0 (2w)
% Cohesive failure (Al)	100

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

1. For best performance bond surfaces should be clean and free from grease.
2. Moisture curing begins immediately after the product is exposed to the atmosphere, therefore parts to be assembled should be mated within a few minutes after the product is dispensed.
3. The bond should be allowed to cure (e.g. seven days), before subjecting to heavy service loads.
4. Excess material can be easily wiped away with non-polar solvents, e.g. mineral spirits or naptha based cleaners.
5. For full automatic applications a volumetric dispensing system is recommended.

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. Shelf life of the product is 9 months. Do not use LOCTITE® AA 5820™ after 9 months storage. . 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.

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

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