

LOCTITE[®] 516 GM-NA

Known as LOCTITE[®] DRI 516 GM-NA
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PRODUCT DESCRIPTION

LOCTITE[®] 516 GM-NA provides the following product characteristics:

Technology	Acrylic
Chemical Type	Acrylic
Appearance (uncured)	Burnt orange to brown liquid
Viscosity	High, thixotropic
Cure	Convection oven air dry
Application	Thread sealing
Specific Benefits	Reusable up to five times

LOCTITE[®] 516 GM-NA is a high viscosity, non-toxic, thixotropic, preapplied, water-based thread sealant for automatic dispensing applications. When dried, it becomes a resilient, tight-clinging, non-curing sealant for tapered or straight threads. LOCTITE[®] 516 GM-NA provides positive sealing and resistance to vibrational loosening. The thread-filling ability and prevailing torque characteristics of this product are effective for use on sealing applications, particularly where re-adjustments are required, e.g. rear axle filler plugs, bearing adjuster nuts, pressure gauges and sensors, brake fittings, pipe fittings, and compressor pipe plugs. Other devices that this product is designed for includes; cable connectors, screws for plastic assemblies, adjustment screws, overhead fire sprinklers, shower heads, and door closure hardware. This product is typically used in applications with an operating range of -54 °C to +150 °C.

TYPICAL PROPERTIES OF NON-DRIED MATERIAL

Specific Gravity @ 23 °C	1.1
Viscosity, Brookfield - RVT, 25°C, mPa·s (cP):	
Spindle 7., speed 20 rpm	23,000
Solids/Non-Volatile Content, %	41
On Part Life, years	4
(when stored in a cool, dry area)	

TYPICAL PERFORMANCE OF DRIED MATERIAL

Adhesive Properties:

Instant Seal, 12.7 mm NPT fittings pressurized to 830 kPa

Torque Strength

Seated Torque:

3/8 x 16 steel nuts & bolts	N·m	40.7
	(lb·in)	(360)

Breakloose Torque:

3/8 x 16 steel nuts & bolts	N·m	19.8
	(lb·in)	(175)

Prevail Torque:

3/8 x 16 steel nuts & bolts	N·m	2.4
	(lb·in)	(21)

Chemical/Solvent Resistance

Test performed on 12.7mm NPT tee's and malleable plugs test at 830 kPa air after 30 days immersion in solvents indicated.

Environment	°C	% of initial strength
		Results h
Motor oil (10W30)	120	No leakage
Water/glycol 1:1	100	No leakage
Diesel fuel	50	No leakage
Dextron III	120	No leakage
Hydraulic Steering Fluid	120	No leakage

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 Assembly

1. For best results, clean all bond surfaces and allow to dry.
2. The film coating requires 15 to 20 minutes at 85°C (185 °F) with an airflow of not less than 17,000 L/m (600 cfm).
3. For smaller non-production applications please contact Henkel representative for assistance.
4. LOCTITE[®] 516 GM-NA is usually applied to threaded parts by authorized process centers who have automatic fastener cleaning, feeding, coating, rust proofing and drying equipment. Quantities can be handled

promptly with minimum turnaround time. Sample fittings should be sent to the nearest authorized process center where they will coat your parts and return them for your evaluation. **SAMPLE TESTS ARE RECOMMENDED TO OBTAIN DESIRED RESULTS ON YOUR PARTS.** Contact the nearest authorized process center near you.

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 Henkel representative for related approval or certificate of this product.

Data Ranges

The data contained herein may be reported as a typical value and/or range. 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

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