



TECHNICAL DATA BULLETIN

INSTAbond® 414

Liquid Anaerobic Sealant

PRODUCT DESCRIPTION:

INSTAbond® 414 is a low strength, high viscosity threadlocking compound designed for intermediate and large sized threaded fasteners or threaded surfaces. It offers moderate chemical resistance and slow fixture time for items requiring adjustment. Parts can be separated using hand tools. INSTAbond® 414 complies with MIL-S-22473 Grade HVV / ASTM D5363 AN0163.

Physical Properties (Uncured)

Parameters	Test Method	Specification
Color	-----	Brown
Viscosity, 25 deg C	ASTM D445	1,000-10,000 cPs
Specific Gravity, 25 deg C	ASTM D792	1.1 gms/ml
Flash Point	ASTM D56	>93 deg C
UV Light Properties	-----	Illumination @ 230 nm

CURED PROPERTIES

Properties	Specifications
Fixture Time:	
Unprimed steel @ 25 °C	2 - 4 hours
*Primed steel @ 25 °C	1 - 2 hours
Full Cure:	
Unprimed steel @ 25 °C	18 - 24 hours
*Primed steel @ 25 °C	12 - 18 hours
Average Locking Torque, 24 hours @ 25°C	1.1 – 2.8 N-m
Hot Strength, 2 hours @ 93 deg C	0.7 (prevailing torque)
Solvent Resistance: (Prevailing Torques)	
Distilled Water	1.09 N-m
n-Butanol	0.53 N-m
Toluene	0.67 N-m
Motor Oil (10W-30)	1.01 N-m
JP-4 Jet Fuel	0.65 N-m
Ethylene Glycol	0.75 N-m
Temperature Range	-65 – 300 deg F



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GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be used with a sealant for chlorine-containing constituents or other strong oxidizing materials. This product is not suitable for use on plastic parts. Refer to Material Safety Data Sheet for instructions on safe handling of this material.

STORAGE

This product should be stored less than 100 deg F and out of direct sunlight. Product should be stored in the original, closed container. NEVER combine liquid primers/activators with anaerobic sealing compounds as violent chemical reactions will result. Shelf life is 18 months when stored in accordance with manufacturer's recommendations.

DIRECTIONS FOR USE

Substrates should be cleaned and degreased with a solvent such as acetone, MEK, or trichloroethylene. Do use mineral spirits or Stoddard solvent. Allow substrates to dry completely before applying sealing compound. Apply sealing compound to both surfaces and assemble. For faster cure speed and maximum bonding, apply INSTAbond® Primer N or T prior to application of sealing compound. Allow primer to dry thoroughly before applying sealing compound. Once fixturing has occurred, no adjustments should be made as this will decrease the sealing compound's total locking strength once the fixture bond is broken.

NOTE

The information contained in this document is furnished for information only and it's believed to be reliable based on previous evaluations. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for user's application based on user's production methods. This data should only be used as a guide for determining feasibility for a particular application.

PRODUCT INFORMATION CONTAINED HEREIN IS INTENDED FOR REFERENCE ONLY. MATERIAL SAFETY DATA INFORMATION AVAILABLE AT (662) 895-4480 OR IN WRITNG TO: ACCRAbond, Inc. 8848 Hacks Cross Road, Olive Branch, MS 38654, www.accrabond.com.