

# Nutlock Technical Data Sheet

# **PRODUCT DESCRIPTION**

Nutlock is a medium viscosity anaerobic with medium to high strength performance for use as a threadlocking adhesive for all types of metal, threaded fasteners. Cured performance shows consistent strength on industrial fastener finishes from black oxide to zinc plated steel. Product has good solvent and temperature resistance and can be used with most industrial lubricants, oils, cleaners with a minimum of precleaning. Can be used on any metal surface including oily steel, aluminum, stainless steel and zinc plated parts for diameters up to 2". The product is stronger and faster curing than 242 and gives better lubricity and consistency of performance. This product cures rapidly on normal plated or oiled metal surfaces and fixtures within 5 minutes on steel and black oxide and within 15 minutes on zinc plate and stainless steel surfaces. Nutlock has special lubricating ingredients to provide a consistent torque-tension relationship with degreased phosphate and oil finishes, which works over the entire recommended torque range for grade 5 fasteners.

#### Base Resin- Methacrylate

Percent Solids- 100%

#### **Benefits of Adhesive:**

- Good Adhesion and Sealing Capability
- 100% Solids Formulation For Cost-Effectiveness
- Medium Strength for Removable Applications
- Good Chemical Resistance
- Non migrating, thick gel

# PHYSICAL PROPERTIES TYPICAL UNCURED PROPERTIES (LIQUID)

Viscosity-

Specific Gravity Color-Toxicity12000cps at 2.5 rpm, #3 spindle, Brookfield RV 2500cps at 20rpm, #3 spindle. 1.04 (20°C) Blue Low, see MSDS

# **TYPICAL CURING PROPERTIES**

Fixture Time Full Cure Time

Cure Activity-

5-8 minutes @ 23 °C on steel 4 hrs. @ 23 °C on steel 24 hrs @ 23 °C on zinc Fastest on plain steel fasteners, slower on zinc plated or stainless steel.

Range 120-150 in-lbs. depending on surface cleanliness, typical value is 80 in-

Range 70-90 in-lbs. depending on surface typical value is 30-50 in lbs. on zinc plated.

# TYPICAL CURED PROPERTIES (SOLID)

Torque Strength: Breakaway/Steel 3/8-16 UNC, M10

Prevail torque 3/8-16 UNC

#### **Thermal Service Range-**

-50°C to 150°C

lbs. on zinc plated.



# Nutlock Technical Data Sheet

**Solvent Resistance**-Water, oil, glycol, gasoline @ 60°C

transmission fluid immersion tests.

80 - 100% retention of strength

# **Typical Process Methods:**

Apply adhesive to male threads. Does not have to be applied to 100% of thread area in order to provide locking torque. Assemble with mating threaded component. Tighten to desired torque within 5 minutes of assembly.

# **Curing Information:**

Fixture Time:

15 minutes on zinc,5-8 minutes on steel and black oxide.24 hours.

Full Strength:

#### **Application Note:**

Material is not sensitive to moisture, but is sensitive to UV light and heat. Will not cure if exposed to air. Do not use with oxygen systems.

# Shelf Life of Packaged Product:

12 months at 23°C when stored in sealed original containers.

# Important Note

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee, since the conditions of use are beyond the control of the Company. It is the customer's responsibility to satisfy themselves self that each product is fit for the purpose for which he intends to use it, that the actual conditions of use are suitable and that in the light of continued research and development the information relating to each product has not been superseded.