

Technical Data Sheet

PRODUCT DESCRIPTION

301277 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 10 minutes on steel and black oxide and within 15-30 minutes on zinc plate and stainless steel surfaces. 301277 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- Di-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- 12000cps at 2.5 rpm, #3 spindle, Brookfield RV
 2500cps at 20rpm, #3 spindle.
Specific Gravity 1.04 (20°C)
Color- Blue
Toxicity- Low, see MSDS

TYPICAL CURING PROPERTIES

Fixture Time 10-30 minutes @ 23°C on steel
Full Cure Time 24 hrs @ 23°C
Cure Activity- Fastest on plain steel fasteners,
 slower on zinc plated or stainless steel.

TYPICAL CURED PROPERTIES (SOLID)

Torque Strength:
Breakaway/Steel 3/8-16 UNC, M10 Range 8 - 22 N.m depending on surface cleanliness, typical value is 15 N.m

Prevail torque 3/8-16 UNC Range 2.5 - 22 N.m depending on surface typical value is 7 N.m

Thermal Service Range- -50°C to 150°C

TDS NO.	ISSUE	DATE:	PAGE NO.	ISSUED BY
301277	4	07/10/16	1 of 2	M.JOYCE

Technical Data Sheet**DIRECTIONS FOR USE:**

301277 is not recommended for use in piping systems that contain pure oxygen or an oxygen-rich environment, chlorine, or strong oxidizing substances.

For Assembly:

1. Ensure parts are clean, dry and free from oil, grease and dirt. For best results, clean and dry parts with solvent (Activators can also be used on inactive surfaces or to accelerate the cure on active surfaces.)
2. Shake the adhesive bottle well before use.
3. Avoid touching the metal surfaces with the bottle tip since the metal ions may react with the adhesive upon contact and eventually may clog the bottle tip.
4. Apply adhesive onto the threaded part where the contact area will be in the final assembly. For larger parts, use more adhesive and rotate the threaded part to spread adhesive evenly around contact area.
5. For through holes, apply several drops of adhesive onto the bolt at the nut engagement area. For blind holes, apply several drops of the adhesive down the internal threads to the bottom of the hole.
6. Assemble the nut / fastener and tighten as required.
7. Allow assemblies to set for sufficient time so that handling strength or full cure will occur before further processing or testing.

For Disassembly:

1. Loosen or remove with regular hand tools.
2. If hand tools do not work due to the assembled parts being well tightened, apply localized heat (approx. 250°C) to the nut or bolt and disassemble while parts are still hot. Use extreme caution when working with heat sources (e.g. heat gun, flames, etc.)

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.

TDS NO.	ISSUE	DATE:	PAGE NO.	ISSUED BY
301277	4	07/10/16	1 of 2	M.JOYCE