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9411 Corsair Road  
Frankfort, IL 60423  
1-800-552-0299 Phone  
1-815-464-5650 Fax

**EMERGENCY PHONE 1-800-255-3924**

## TECHNICAL DATA SHEETS

### TORQUE 62TL

#### Description:

**TORQUE 62TL** is a medium viscosity anaerobic adhesive for thread locking of large diameter studs, nuts and bolts of all types that require to be dismantled. Highly resistant to heat, corrosion, vibrations, water, gases, oils, hydrocarbons and many chemicals.

#### PROPERTIES OF UNCURED PRODUCT (typical value)

|                                         |                         |
|-----------------------------------------|-------------------------|
| Composition                             | Dimethacrylate ester    |
| Appearance                              | Red, Fluorescent Liquid |
| Specific Gravity (77°F/25°C g/ml)       | 1.1                     |
| Viscosity, Brookfield (77°F/25°C mPa.s) |                         |
| Spindle 3- 2 rpm                        | 2500 to 7500 mPa.s      |
| Spindle 3 - 20 rpm                      | 1200 to 2400 mPa.s      |
| Flash Point, TCC                        | >93°C                   |
| Shelf life at 20°C                      | 1 year                  |
| Storage temperature                     | 8° - 28°C               |

#### PROPERTIES OF CURED PRODUCT (typical value)

|                                                   |  |                                         |
|---------------------------------------------------|--|-----------------------------------------|
| <b>Functional strength at 24 hrs 20° on steel</b> |  |                                         |
| Breakaway torque (ISO 10964)                      |  | 14 to 29 N.m                            |
| Breakloose torque (DIN 54454)                     |  | 25 to 50 N.m                            |
| Coefficient of thermal expansion (ASTM D696):     |  | 80 X 10 <sup>-6</sup> 1/K               |
| Thermal conductivity(ASTM C177)                   |  | 0.1 W/Mk                                |
| Specific heat                                     |  | 0.3 Kj.Kg <sup>-1</sup> K <sup>-1</sup> |
| Temperature range                                 |  | -55°+150°C                              |

#### ENVIRONMENTAL RESISTANCE

##### Hot strength at temperature

| Test.Temp.°C | % retained strength |
|--------------|---------------------|
| 25°          | 100%                |
| 50°          | 95%                 |
| 100°         | 75%                 |
| 150°         | 50%                 |

##### Heat aging

Samples aged 2000 hours at indicated temperature and tested at room temperature.

| Test temp. °C | % retained strength |
|---------------|---------------------|
| 120°          | 65%                 |
| 150°          | 25%                 |

##### Chemical / Solvent Resistance

Specimens immersed for 1000 hours at indicated temperature and tested at room temperature.

|                      | Test Temp.° C | % retained |
|----------------------|---------------|------------|
| strength             |               |            |
| 50/50 Water / Glycol | 87            | 85         |
| Leaded Petrol        | 22            | 100        |
| Motor Oil            | 125           | 75         |
| Brake Fluid          | 22            | 100        |
| Acetone              | 22            | 95         |



# TECHINCAL DATA SHEETS

## TORQUE 62TL



### HEAT CURE

Typical heat cure conditions consist of heating and maintaining bondline at a temperature of 40°C and after one hour more than 80% of strength on steel is achieved.

### CURE SPEED VS. SUBSTRATE

| % Full strength | Steel     | Brass  | Stainless Steel |
|-----------------|-----------|--------|-----------------|
| 25              | 25 min    | 30 min | 15 hrs          |
| 50              | 40 min    |        |                 |
| 100             | 10-72 hrs |        |                 |

### CURE SPEED VS. JOINT GAP

| % Full strength | Gap 0,05mm | Gap 0,25mm |
|-----------------|------------|------------|
| 25              | 20 min     | 9 hrs      |
| 50              | 40 min     | 24 hrs     |
| 100             | 12- 72 hrs |            |

### CURE SPEED VS. TEMPERATURE

| % Full strength | Temperature |            |
|-----------------|-------------|------------|
|                 | 5°C         | 40°C       |
| 25              | 6 hrs       | 15 min     |
| 50              | 8 hrs       | 20 min     |
| 100             |             | 4 - 72 hrs |

### DIRECTIONS FOR USE

Use on clean and degreased parts. The product will cure correctly between close fitting flanged parts with gaps up to 0,05mm. Flanges should be tightened as soon as possible after assembly to avoid shimming.

### GENERAL INFORMATION

**This product is not recommended for use with strong oxidizing materials.**

Where aqueous washing systems are used to clean the surfaces before bonding, these aqueous washes can affect the cure and performance of the adhesive.

This product is not normally recommended for use on plastics, users must check compatibility of the product with such substrates.

**Engineering Excellence**

For technical information  
and support call **1-800-552-0299** or visit our website at

**[www.instantca.com](http://www.instantca.com)**