



TECHNICAL DATA SHEET

# BOSS® 206 Extreme Duty Locking Compound

### TYPICAL PROPERTIES

#### Monomer (Liquid)

Base Compound ..... Dimethacrylate Ester  
 Appearance ..... Red Liquid  
 Viscosity (cP @ 68°F) ..... 7000 cP  
 Specific Gravity (g/cc) ..... 1.1  
 Gap Fill ..... .016"  
 Corrosivity ..... None  
 Flash Point (TCC) ..... >200°F  
 Toxicity ..... Low  
 Shelf Life @ 40°F ..... 1 Year Unopened

#### Polymer (Cured)

Locking Strength ..... High  
 Appearance ..... Red Solid  
 Service Temperature Range ..... -75°F - 400°F  
 Full Cure Time ..... 24 Hours  
 Shear Strength (steel nuts and bolts) ..... 3000 psi

\*Information on this data sheet is subject to change without notice and should not be used for writing specifications.  
 For additional information on specific applications, contact Accumetric, LLC



### PERFORMANCE OF CURED MATERIALS

Bond strength after 24 hours at 69°F to 78°F (20°C to 25°C) on steel nuts and bolts.

|                   | Average Value | Range            |
|-------------------|---------------|------------------|
| Breakaway Torque  | 255 in. lbs.  | 160-340 in. lbs. |
| Prevailing Torque | 260 in. lbs.  | 190-330 in. lbs. |

### DESCRIPTION

**BOSS® 206** Extreme Duty Locking Compound is a single component, high viscosity anaerobic thread locking adhesive, which is thixotropic and develops high strength. The product cures between close fitting metal parts where there is an absence of air.

### CURING PERFORMANCE

The gap of the bond line will affect set speed. Smaller gaps tend to increase the speed. Activators can be applied to improve set speed but may also impair overall adhesive performance.

### FEATURES

- Meets Military Specification Mil-S-46163A, Type II, Grade K
- Prevents loosening and leaking of threaded fasteners
- Suitable for large assemblies and heavy duty applications where high levels of shock, vibration and stress are present

### SETTING TIME (68°F, 65% RH)

**Substrate ..... Set Time / Full Cure**  
 Steel ..... 25 minutes / 24 hours  
 Brass ..... 45 minutes / 24 hours  
 Zn Dichromate ..... 55 minutes / 24 hours  
 Stainless Steel ..... 60 minutes / 24 hours

## HOW TO USE

Surfaces to be bonded should be clean, dry and free of grease.

Product should be applied in enough quantity to fill all engaged threads. The product performs best in thin bond gaps. Very large gaps may create gaps which will affect the cure speed and overall strength. Good contact is essential. An adequate bond develops in 15 to 45 minutes and maximum strength is attained in 24 hours.

**This product is not recommended for use in pure oxygen environments and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.**

This product is not designed for plastics, particularly thermoplastics where stress cracking of the plastic could result. It is recommended to confirm compatibility of the product with all substrates prior to use.

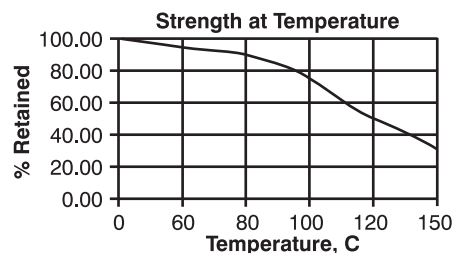
## CHEMICAL RESISTANCE

Shear strength on steel after 500 hours

| Solvent .....           | % Strength Retained |
|-------------------------|---------------------|
| Motor Oil .....         | 90                  |
| Unleaded Gasoline ..... | 100                 |
| Trichloroethane .....   | 90                  |
| Brake Fluid .....       | 100                 |
| Ethanol .....           | 90                  |
| Acetone .....           | 95                  |
| Water/Glycol Mix .....  | 95                  |

## TEMPERATURE RESISTANCE

% Retained strength when tested at temperature



## PACKAGING

**BOSS® 206** is available in 50ml and 250ml bottles.

## SHIPPING LIMITATIONS

None.  
Reactive VOC 89.9 g/l

## STORAGE AND SHELF LIFE

When stored in the original unopened containers at or below 90°F (32°C), **BOSS® 206** Extreme Duty Locking Compound has a shelf life of 12 months from date of shipment. In Countries where high heat and humidity are a factor, special precautions must be taken. Store product in a covered, well-ventilated warehouse and avoid excessive heat conditions. Storage in high heat, high humidity conditions may reduce shelf life by up to 30%. Rotation of stock is an absolute necessity.

Products can be refrigerated for improved shelf life but should be brought back to room temperature before use.

## CAUTION

DIRECT CONTACT OF UNCURED PRODUCT IRRITATES EYES AND MAY IRRITATE SKIN. OVEREXPOSURE TO VAPOR MAY IRRITATE EYES, NOSE, AND THROAT. Avoid eye and skin contact. Use with adequate ventilation. Do not handle contact lenses with sealant on hands. IN CASE OF EYE CONTACT, flush eyes with water for 15 minutes. Obtain medical attention. IN CASE OF SKIN CONTACT, remove from skin and flush with water. KEEP OUT OF THE REACH OF CHILDREN. For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

## USERS PLEASE READ

The information and data contained herein is believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since the supplier cannot know all the uses, or the conditions of use to which these products may be exposed, no warranties concerning the fitness or suitability for a particular use or purpose are made.

It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application.

Likewise, if the application, product specifications or manner in which our products are used requires government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

The supplier warrants only that its products will meet its specifications. There is no warranty of merchantability or fitness for use, nor any other express or implied warranty. The users exclusive remedy and the suppliers sole liability is limited to refund of the purchase price or replacement of any product shown to be otherwise than as warranted. The supplier will not be liable for incidental or consequential damages of any kind.

Suggestions of uses should not be taken as inducements to infringe any patents.

MADE IN U.S.A.

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