TB 1342

Print Date: November 9, 1998

## Three Bond 1342

# Anaerobic Adhesive & Sealant

**Three Bond 1342** is a reactive acrylic monomer based anaerobic adhesive and sealant. The setting speed is fast while the fixing strength is low for parts that require frequent removal. Australian Gas Association Standard AG 208 approves it to 1000 kPa pressure.

# **Application**

• For fixing and sealing of screws

## **Characteristics**

| Item                            |             | Units               | Three Bond 1342          | Remarks     |
|---------------------------------|-------------|---------------------|--------------------------|-------------|
| Appearance                      |             |                     | Blue, transparent liquid |             |
| Viscosity                       |             | mPa⋅s               | 150                      | 25°C        |
| Shear Adhesive Strength (Fe/Fe) |             | kgf/cm <sup>2</sup> | 160                      |             |
| Torque                          | Break-loose | kg∙cm               | 92                       | Iron bolt & |
|                                 | Prevailing  | kg·cm               | 71                       | nut, 10 mm  |
| Gap filling                     | Optimum     | mm                  | 0.005 - 0.01             |             |
| Ability                         | Maximum     | mm                  | 0.15                     |             |
| Cure speed                      | Partial     | h                   | 2                        | 25°C        |
|                                 | Full        | h                   | 24                       |             |
| Useable Temperature Range       |             | °C                  | -80 ~ 150                |             |
| Chemical Resistance             |             |                     | Excellent                |             |

**Curing Speed** 

| Temperature (°C) | Curing time (min) | Remarks |  |
|------------------|-------------------|---------|--|
| 80               | 30                |         |  |
| 100              | 20                |         |  |
| 120              | 10                |         |  |

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### **Chemical Resistance**

Test method: 5g of hardened Three Bond 1342 are immersed in various chemicals at 50°C for 3 months.

| Chemicals            | Three Bond 1342 |
|----------------------|-----------------|
| Gear oil             | 4               |
| Engine oil           | 4               |
| Gasoline (lead-free) | 4               |
| Gasoline (leaded)    | 4               |
| Freon                | 3               |
| Water                | 5               |
| Toluene              | 3               |
| Trichloroethylene    | 3               |
| 2% caustic soda      | 3               |
| 2% hydrochloric acid | 4               |
| n-hexane             | 4               |
| 30% aqueous ammonia  | 3               |
| LPG                  | 4               |

| 5 | Useable: Excellent                               |
|---|--|
|   | Weight change factor: ± less than 0.5%           |
| 4 | Useable: Good                                    |
|   | Weight change factor: ± 0.5 % to 2.5 %           |
| 3 | Useable: Fair                                    |
|   | Weight change factor: ± 2.5 % to 5 %             |
| 2 | Useable: Slightly poor depending upon conditions |
|   | Weight change factor: ± 5 % to 10 %              |
| 1 | Useable: Poor                                    |
|   | Weight change factor: over 10 %                  |

# **Handling Precautions**

### • Cleaning of Works

While the presence of a small amount of oil on the surface of work does not affect the practical bonding strength, in order to fully utilise the performance of adhesive, it is essential to eliminate oil and dust completely from the work. Oil and grease can be effectively removed by cleaning with organic solvents such as trichloroethane. For the sake of safety, flammability and other reasons, trichloroethane is most recommended. One should avoid using kerosene, gasoline and light oil because they stick to the work.

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# **TECHNICAL DATA**

## • Storage

Since adhesive sets through chemical reactions, storing it a higher temperature may shorten the service of life. If stored in a cool place, well ventilated and shaded from the sun, the adhesive kept in a specified container may remain usable for up to 6 months. If it is kept in a refrigerator at  $5 \sim 10^{0}$ C, its life is extended to a year or longer.

#### **Shelf Life**

12 months unopened at 10-25°C.

## **Packaging**

Available in sizes of 5g, 50g and 250g.

### **Disclaimer**

## For Industrial Use Only

(Do not use for household purposes)

- The data contained in this report are obtained from experimental results, based on our test methods. We cannot assume absolute responsibility for accuracy and safety. Before using this product, use your own judgement to determine whether or not this product meets the requirements of the application and objectives. This includes the burden of responsibility and hazardous danger. The extent of the guarantee provides replacement for products, which are clearly unsatisfactory.
- We assume responsibility for neither injury nor property damages resulting from the misuse of this product.
- We do not assume responsibility without written notice or contract.