

# Bondmaster F246

## Toughened Acrylic Adhesive

### Technical Information Sheet



Woodside Road, Eastleigh  
 Hampshire SO50 4EX  
 Tel: 023 8061 9822  
 Fax: 023 8065 2270

### **Description:**

Bondmaster F246 is a 2 part 'no-mix' adhesive which cures rapidly at room temperature. Its exceptional resistance to peel, fatigue and impact loads on a wide variety of surfaces, combined with excellent environmental durability and chemical resistance, make it ideal for applications demanding structural integrity. This outstanding performance can allow the adhesive to be used in place of rivets and/or welding thereby providing reduced assembly times, lighter structures and an improved aesthetic appearance.

### **Physical Properties**

Colour	Off White
Viscosity (mPa.s)	30,000
Specific Gravity	1.00

### **Typical Performance**

Shear Strength (MPa) Steel	35
180° Peel Strength (N/25mm) Aluminium	150
Maximum Gap Fill (mm)	0.75

### **Storage:**

When stored in the original unopened containers at 5-25°C, the shelf life of this product is 9 months from the date of despatch from Bondmaster.

The adhesive and Initiator should be stored in original containers with caps/lids tightly fitted and out of direct sunlight. Never pour material back into the container once dispensed.

### **Service Temperature:**

The recommended service temperature range for this product is -60 to +120°C. However higher temperatures may be endured for short periods providing the adhesive is not unduly stressed.

### **Handling:**

Full information can be obtained from the Material Data Sheets (MSDS). Users are reminded that all materials, whether innocuous or not, should be handled according to the principles of good industrial hygiene.

### **Cure Speed:**

	<u>Initiator No.1</u>	<u>Initiator No.5</u>
<b>Handling Strength</b>	2-5 mins.	30-60 secs
<b>Full Strength</b>	24 hrs.	24 hrs.

These figures are typical for steel surfaces at 23°C. Copper and its alloys will give a faster cure whilst oxidised or passivated surfaces such as stainless steel or zinc will require longer cure times. Lower temperatures or large gaps will also tend to extend the cure time.

### **Directions for Use:**

These toughened acrylic adhesives will tolerate a degree of surface contamination but for ultimate performance light abrasion (i.e. Emery Cloth or Shot Blasting) is recommended. An in-process quality check of the surface preparation process can be provided by using **Bondmaster SIP** to ensure consistent results and to further enhance the environmental durability of the joint.

Apply the Initiator sparingly to one surface. (Excess does not give a faster cure but it may reduce the final bond strength). If bonding porous surfaces then apply the Initiator to the porous surface.

Apply the adhesive to the second surface as a bead. Ensure that sufficient adhesive is applied to completely fill the joint and that no air is trapped in the bond line.

Apply light clamping pressure whilst the adhesive develops handling strength.

F246 must be applied as a bead - do not spread or comb out the adhesive as this will result in reduced bond strength. The maximum on-part life of F246 is 5 minutes and assembly must occur within this time if ultimate performance is to be achieved.

The information given and the recommendations made herein are based on our experience and are believed to be accurate. No guarantee as to, or responsibility for, their accuracy can be given or accepted, however, and no statement herein is to be treated as a representation or warranty. In every case we urge and recommend that purchasers, before using any product, make their own tests to determine, to their own satisfaction, its suitability for their particular purposes under their own operating conditions.

20/04/04