

### HYLOBOND M511

#### Description

Hylobond M511 is a toughened, two component acrylic adhesive designed for bonding a wide range of substrates. This structural methacrylate adhesive has superior peel, shear and compressive properties. Hylobond displays high toughness and can be used on gaps up to 5mm. The adhesive has excellent fatigue and weathering resistance.

#### Typical Properties

Uncured Material		
	Adhesive	Activator
Mixing Ratio (By Weight)	1	1
Mixing Ratio (By Volume)	1	1
Colour	Cream	Cream

Mixed Material	
Geltime (@22°C)	≈5min
Cure Time (@22°C)	18 – 24min
Gap Filling	≤5mm
Colour	Cream

Cured Material	
Tensile Strength	25 Nmm <sup>-2</sup>
Elongation	35%
Shear Strength (PVC)	20 Nmm <sup>-2</sup>
Shear Strength (Aluminium)	23 Nmm <sup>-2</sup>
Shear Strength (Steel)	20 Nmm <sup>-2</sup>
Shear Strength (Acrylic)	22 Nmm <sup>-2</sup>

#### Recommended Substrates

##### Metals

Aluminium, stainless steel, carbon steel, powder coated metals, galvanized metals.

##### Plastics

Acrylics, ABS, PVC.

##### Composites

Urethanes, vinyl esters, polyesters, carbon fibre, GRP/FRP.

Information given in this publication is based upon technical data gained in our own and other Laboratories and is believed to be true. However the material is used in conditions beyond our control thus we can assume no liability for results obtained or damages incurred through the application of the data present herein.

Hylomar Ltd, Cale Lane, Wigan WN2 1JT UK Tel: +44 (0) 1942 617000 Fax: +44 (0) 1942 617001	Revision date	14.10.2014	Page 1 of 2
	Product name	Hylobond M511 Issue 2	

### Instructions for Use

The surface to be bonded can have a great impact on the cured properties of Hylobond. Care must be taken to ensure that all traces of oil, grease and dirt are removed from the substrate. This can be done with a degreasing agent or solvent such as acetone. Abrading or etching the surface can greatly improve the adhesion of the bonded joint, if this is done a second degreasing process is highly recommended.

Prior to dispensing it is important to extrude a bead of about 5cm in length. This is to ensure that both components are being extruded at the same rate. The product should be used immediately to prevent curing in the nozzle. Enough adhesive should be used to fill the bond gap before the parts are joined. Once the substrates are joined sufficient pressure should be applied (e.g. by clamping) to avoid dry bonding and prevent movement in the joint. These processes must be completed before the geltime expires.

The optimal application temperature is about 20°C, the geltime and cure time will be affected at temperatures much higher or lower than this. The viscosity is also affected by temperature so to ensure a consistent extrusion rate and geltime the temperature should be kept constant.

### Safety

Hylobond is intended for industrial use and should only be used by a skilled individual provided with the correct protective equipment. See SDS for detailed information regarding the safe use of Hylobond.

### Storage

Store in a cool, dry place between 5°C- 25°C (41°F-77°F) with adequate ventilation.

### Packaging

Please contact our sales department for details.

Information given in this publication is based upon technical data gained in our own and other Laboratories and is believed to be true. However the material is used in conditions beyond our control thus we can assume no liability for results obtained or damages incurred through the application of the data present herein.

Hylomar Ltd, Cale Lane, Wigan WN2 1JT UK Tel: +44 (0) 1942 617000 Fax: +44 (0) 1942 617001	Revision date	14.10.2014	Page 2 of 2
	Product name	Hylobond M511 Issue 2	