

## TECHSIL® OB1 CLEAR SILICONE O'RING BONDER

Techsil® OB1 has been developed to bond a wide variety of heat cured silicone sections. Techsil® OB1 is a ready to use, pre-catalysed one component silicone adhesive offering fast cure at elevated temperature together with excellent primer less adhesion. This product is clear however can be pigmented where colour match is important.

### **Product Features**

- Ready to use - no mixing
- Unlimited pot life at room temperature
- Fast cure at elevated temperature
- Primerless adhesion
- Pigmentable
- No cure by-products – very low shrinkage

### **Uncured properties**

Colour – clear  
Viscosity (cps) – 45-50,000

### **Cured properties**

Hardness (Shore A) - 30-35  
Elongation (%) – 290-300  
Tensile strength (psi) – 340-350

### **Instructions for use:**

Techsil® OB1 Offers excellent adhesion capability without the need of a primer, however the level of adhesion is highly dependent upon surface preparation. All surfaces to be bonded must be clean (free from Talc/French chalk) and dry at the time the adhesive is applied. The best results will be achieved with rubber that has been post cured prior to bonding. However the heat cure cycle required for the adhesive may also be used as a post cure cycle for the finished product. A trial should be carried out to verify this relative to your particular application.

Techsil® OB1 has an unlimited pot life at room temperature and so may be used in a dip bath or transferred to any other convenient application system. If the product is used in an open container, care must be taken not to allow contamination of the surface. The cure time of Techsil® OB1 depends on the temperature the parts are exposed to together with the section of the rubber to be bonded. Parts may be pre-heated (up to an acceptable handling temp) prior to application and final heat cure.

Cure of Techsil® OB1 may be achieved by heat soak of the whole part or alternatively local heat may be applied by a heat gun etc. Typical bond time for a 12mm dia cord heated locally to 250C would be 3 minutes. Strength of the bond will be affected by the length of time the part is heated, a trial should be carried out to prove the best time v temperature combination for your application. Techsil® OB1 can be used to bond silicone to many other substrates, however, materials such as butyl and chlorinated rubbers, any material containing sulphur amines and tin soap cured RTV silicone will all inhibit the cure. Cure inhibition is characterised by a poor cure condition (partial or complete) at the interface between the Techsil® OB1 and the mating surface to be bonded.

### **Contact Details**

Techsil Ltd  
Unit 34, Bidavon Industrial Estate, Waterloo Road, Bidford on Avon, Warwickshire, B50 4JN  
Tel: +44(0)1789 773232 Fax: +44(0)1789 774239 Email: sales@techsil.co.uk Web: www.techsil.co.uk

### **Availability**

Techsil® OB1 is available in 500gm tins or pre-packed 30cc syringes which can be dispensed manually or by a variety of Air Powered systems-please enquire for details.

### **Storage**

Material supplied in original unopened containers under cool dry condition between 0°C and 10°C should have a shelf life of 12 months. Each batch of material will have an actual use by date allocated at the time of manufacture; this can be confirmed by the Techsil Sales Office. Once used, the containers must be kept sealed, to prevent effects from contaminants.

### **DISCLAIMER**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability of such information for their particular use.

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