

Technical Data Sheet



Product overview

Hybrid Bonding Pastes

Poly-Bond B55LV (low viscosity) is a white, low-density polyester-based compound designed to replace resin in a closed mould compression-type process. As a displacement moulding compound, Poly-Bond B55LV has an excellent flow with low closing pressures obtained when the mould halves are clamped together. Poly-Bond B55LV is well suited for bonding polyester composite parts. The bond strength generally exceeds the interlaminar strength of the mat laminates.

Features and benefits

Low Weight

Reliable strength in thin and thick bond lines

Bond strength exceeds interlaminar strength

Excellent "wet-out" of surface



No volume loss during pumping





Rapid hardness development



High bond-strength adhesive for polyester laminates

Typical Application Properties		
Colour	Off-white	
Gel Time at 85°F (29°C)	35 – 50 minutes	
Peak Exotherm (100g mass)	310°F (154°C)	
Recommended Thickness Range	1/8" – 1" (3 – 25mm)	
Catalyst ¹	Med Reactivity MEKP*	

Typical Mechanical Properties		
Shrinkage	< 1%	
Hardness	> 65 Shore D	

Typical Liquid Properties		
Viscosity ²	4,000 - 6,400 cPs	
Thixotropic Index	1.5 – 3.0	
Specific Gravity	0.74 - 0.78 g/cc; 6.2 - 6.5 lbs / gallon	
Shelf life ³	12 months	

^{*}Please contact Scott Bader Technical Support for more information on catalysation



Application

Product may settle and must be mixed thoroughly before use. It is important to choose a mixer which folds and stirs the material eliminating the injection of air.

Typically, Poly-Bond B55LV is poured into 2-part mould next to the gelcoat to wet out a continuous strand mat (or other reinforcement). It is also well suited for the skins of a sandwich. The core material is typically a structural foam. The Poly-Bond B55LV acts both as a low-density gap-filling material as well as the resin to wet out the reinforcements and then bonds all components together.

Poly-Bond B55LV is catalysed with MEKP catalyst. It can be used in bond line thicknesses up to 1" (25mm).

Storage and shelf life

The product should be kept in securely enclosed containers. Storage should be in a dry place out of direct sunlight. The temperature should be between 65-77° F (18-25° C). Allow Poly-Bond to reach shop temperature before using. Keep containers closed to eliminate styrene evaporation, and to avoid change in properties of the material.

Poly-Bond B55LV is a stable product, and adequate long-term storage conditions will result in a shelf-life of 6-12 months or more. After this time, the geltime may drift, and should be checked before use.

The shelf life is defined from date of manufacture when stored as recommended. The expiry date is indicated on product labels.

Packaging

Poly-Bond B55 LV is supplied in 5-gallon (19 litre) or 50-gallon (189 litre) drums.

Health and safety

See separate Safety Data Sheet.

NOTICE: All precautionary labels and notices should be read and understood by all supervisory personnel and employees. Consult OSHA and government regulations for additional safety and health information. Purchaser is responsible for complying with all federal, state, or local laws and regulations covering the use of this product. The information contained herein is correct to the best of our knowledge. Please check our website for latest updates. The recommendations or suggestions contained in this bulletin are made without guarantee or representation as to results. We suggest that these recommendations and suggestions are evaluated by the purchaser's technical staff prior to use. Our responsibility for claims arising from breach of warranty, negligence, or otherwise is limited to the purchase price of the material. All values can be revised due to ongoing testing and are subject to change without notice.

Notes

- - 2. Measured using Brookfield HAF Spindle T-A, 5 RPM at 85°F (29°c)

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