# Isotec International Inc



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## TECHNICAL DATA SHEET

# IsoBond 41

IsoBond 41 is a one part, single coat bonding system. IsoBond 41 is suitable for bonding castable polyurethane elastomers and RIM polyurethanes to a variety of substrates, including mild steel, stainless steel, brass, aluminum, acrylic plastics, ABS, GRP, epoxies, and concrete at ambient temperatures of 68° F (20° C) or above. The system has been designed to bond polyurethane elastomers curing at temperatures from 68–194° F (20–90° C). However, higher temperature curing elastomers, also bond well with IsoBond 41. When used as a two component adhesive with IsoCure B, improved environmental resistance is achieved and the system will bond fusion bonded epoxies and cured elastomers such as NR, CR, PU, etc.

\*Values given are not intended to be used in specific preparation

<b>Component Properties</b>	
Color - ISO	Pale Yellow
Specific Gravity - 74°F	.84
Viscosity - ASTM-D-2196 - 74°F	10 cps
% Solids	18 %
Reactivity Profile	
Full Cure	24 Hours
Typical Physical Properties	
Lap Shear ABS - ASTM D1002	676 - 368 psi
Lap Shear Acrylic - ASTM D1002	492 - 806 psi
Lap Shear Aluminum - ASTM D1002	443 - 412 psi
Lap Shear Maple - ASTM D1002	233.5 - 233.5 psi
Lap Shear PVC - ASTM D1002	945 - 577 psi
Lap Shear SMC - ASTM D1002	109 - 145 psi

## RECOMMENDED HANDLING INSTRUCTIONS

IsoBond 41 must be mixed thoroughly before and during use and may be applied to the metal substrate by brushing, dipping, or spraying.

After application the system should be left to dry for 20-30 minutes at room temperature. The best bonding results are obtained using a dry film thickness of 15-25 µm.

Excellent bonds are obtained with or without pre-baking, but IsoBond 41 will withstand up to 2 hours pre-bake at 194–212° F (90–100° C).

If using IsoCure B, mix 100 parts IsoBond 41 to 5–8 parts IsoCure B (by weight). Using 5 parts of IsoCure B for improving environmental resistance and up to 8 parts for achieving bonds to cured rubber. The IsoCure B must be added to well stirred IsoBond 41 and the mixture stirred for a few minutes. Use within 24 hours or when it has become viscous, gelatinous or excessively hazy. Shelf Life 2 years at 78.8 F (26° C).

### **STORAGE**

#### **SAFETY**

The solvents used in IsoBond 41 are flammable. Do not use around an open flame. Store in accordance with local fire laws and regulations. Normal fire safety precautions must be taken.

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