## IsoBond 41


#### Abstract

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 $68^{\circ} \mathrm{F}\left(20^{\circ} \mathrm{C}\right)$ or above. The system has been designed to bond polyurethane elastomers curing at temperatures from $68-194^{\circ} \mathrm{F}\left(20-90^{\circ} \mathrm{C}\right)$. 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 |  |
| :--- | :---: |
| Component Properties | Pale Yellow |
| Color - ISO | .84 |
| Specific Gravity - $74^{\circ} \mathrm{F}$ | 10 cps |
| Viscosity - ASTM-D-2196-74 F | $18 \%$ |
| \% Solids |  |
| Reactivity Profile | 24 Hours |
| Full Cure |  |
| Typical Physical Properties | $676-368 \mathrm{psi}$ |
| Lap Shear ABS - ASTM D1002 | $492-806 \mathrm{psi}$ |
| Lap Shear Acrylic - ASTM D1002 | $443-412 \mathrm{psi}$ |
| Lap Shear Aluminum - ASTM D1002 | $233.5-233.5 \mathrm{psi}$ |
| Lap Shear Maple - ASTM D1002 | $945-577 \mathrm{psi}$ |
| Lap Shear PVC - ASTM D1002 | $109-145 \mathrm{psi}$ |
| Lap Shear SMC - ASTM D1002 |  |

## 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 $15-25 \mu \mathrm{~m}$.
Excellent bonds are obtained with or without pre-baking, but IsoBond 41 will withstand up to 2 hours pre-bake at $194-212^{\circ} \mathrm{F}\left(90-100^{\circ} \mathrm{C}\right)$.
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 $78.8 \mathrm{~F}\left(26^{\circ} \mathrm{C}\right)$.

## 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.

## Date Modified 12/1/2016

Since Seller exercises no control over Buyers application or use of the product manufactured by Seller ("product") and since materials used with the product may vary, it is understood that:

- THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OR MECHANTABILITY OR FOR ANY PARTICULAR PURPOSE. While all data presented in Seller's technical data sheet is based on the best information available to Seller and believed correct, such data is not to be construed as a warranty that the product will conform to such specifications. Such technical data sheets are subject to change without notice. Reported laboratory test results of fire redundancy in no way relates to the actual performance under fire conditions. Since all urethane systems are organic, they will burn.
- Reported laboratory test results of the color stability in no way relates to the actual performance upon exposure to light sources. Since all aromatic urethanes experience color degradation upon ultraviolet light exposure, Seller shall not be liable for any damages resulting from ultraviolet light color degradation of any aromatic urethane systems manufactured or sold by Seller.
- The liability of the Seller shall not exceed the purchase price and the Buyer shall not be entitled to nor the Seller be liable for any consequential, incidental, indirect or special damages resulting in any manner from the furnishing of the product.
www.isotecintl.com

