IsoBond HM 1110

IsoBond HM 1110 is a one-component reactive hot melt adhesive ideal for bonding many plastics and diverse composite materials to wood or other plastics. Once cured, it provides strong, temperature resistant bonds. It is an ideal adhesive for applications requiring low viscosity and high flexibility characteristics.

APPLICATIONS

- Automotive Components
- Book Binding
- Edge profiling, banding
- Industrial manufacturing
- Plastics
- Point-of- Purchase Displays
- Various OEM Applications

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

Component Properties	
Viscosity - ASTM-D-2196 - 114°C, ISO	6000 cps
% Solids	100 %
Reactivity Profile	
Open Time - 1/8 inch Normal	80 Seconds
Set Time - Wooden Block - Normal	45 Seconds
Set Time - 1/8 inch	45 Seconds
Open Time - ASTM D4497 - 20 mil	10 Seconds
Open Time - ASTM D4497 - 4 Mil	8 Seconds
Typical Physical Properties	
Lap Shear ABS - ASTM D1002	558 psi
Lap Shear Acrylic - ASTM D1002	552 psi
Lap Shear Aluminum - ASTM D1002	248 psi
Lap Shear Maple - ASTM D1002	708 psi
Lap Shear PVC - ASTM D1002	298 psi
Lap Shear SMC - ASTM D1002	558 psi
Hardness - ASTM D2240 - Shore D	35 Shore D
Tear Strength - ASTM D624, Die C	389 pli
Tensile Modulus - ASTM D412	22340 psi
Tensile Strength - ASTM D412	1020 psi
Elongation - ASTM D412	420 %

RECOMMENDED HANDLING INSTRUCTIONS

Isotec® International's Recommended Application and Handling Instructions
-Use only in well-ventilated areas.
-Wear chemically resistant rubber gloves, safety glasses, and an apron.
-Avoid prolonged or repeated contact with skin.
-In case of skin contact, wipe affected area with isopropyl alcohol, followed by soap and water.
-In case of eye contact, flush eyes with water for 15 minutes and consult a physician.
-If swallowed or comes into contact with eyes, seek medical attention immediately.

- Surfaces should be clean and dry before applying PUR hot melt
- Clean plastic surfaces with isopropyl alcohol before gluing to remove any mold release, oil, or plasticizer contamination.
- Clean rubber, aluminum, and glass with MEK before gluing.
- Mechanical sanding of surfaces can improve PUR adhesion beyond the typical values indicated in this document.
- PURs perform well as a thin film of 1/8" thickness or less, 5 mils is adequate.
- PURs require moisture to fully cure. Optimal bonding occurs when one surface reacts with the urethane or is porous to humidity. Wood, cardboard, and natural fabrics react with the urethane, while most plastics block moisture.

- Hot melts aren't suitable for non-porous materials with large surface areas. These include plastic on plastic, plastics to metal, and glass to metal.
- Place parts together within the open time of the adhesive, then hold or clamp the parts until the set time passes.
- Final cure time varies with temperature, humidity, and surface porosity.
- Remove excess material after it is waxy, 10 – 60 minutes after application
- Cured PUR is removable by cutting, scraping, or sanding, but not by burning.
- Do not apply or heat PUR above 280 °F. Performance will be degraded.

STORAGE

Protect from moisture. If the ISO side material is exposed to moisture, including moisture from the air, it will release CO2 gas. If placed in a sealed container, this gas can cause a dangerous buildup of pressure potentially resulting in injury or death.

SAFETY

-Refer to the product SDS for all relevant safety information.

Date Modified 4/1/2020