

IsoBond HM 1114

IsoBond HM 1114 is a reactive hot melt designed to have a long open time and remain tacky for extended periods.

APPLICATIONS

- Aerospace Parts
- Automotive Accent pieces
- Automotive Components
- Electrical Components

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

Component Properties

Color - ISO	white or various
Viscosity - ASTM-D-2196 - 114°C, ISO	12,000 cps
% Solids	100 %

Reactivity Profile

Open Time - 1/8 inch Normal	5 Minutes
Set Time - Wooden Block - Normal	10 Minutes
Open Time - ASTM D4497 - 20 mil	14 Minutes
Open Time - ASTM D4497 - 4 Mil	3 Minutes

Typical Physical Properties

1 minute Green Strength	.6 psi
5 minute Green Strength	10 psi
15 minute Green Strength	41 psi
Lap Shear ABS - ASTM D1002	650 psi
Lap Shear Acrylic - ASTM D1002	836 psi
Lap Shear Aluminum - ASTM D1002	415 psi
Lap Shear Maple - ASTM D1002	894 psi
Lap Shear PVC - ASTM D1002	736 psi
Lap Shear SMC - ASTM D1002	620 psi
Hardness - ASTM D2240 - Shore D	50 Shore D
Tear Strength - ASTM D624, Die C	168 pli
Tensile Modulus - ASTM D412	12 ksi
Tensile Strength - ASTM D412	861 psi
Elongation - ASTM D412	243 %

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 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.

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- THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OR MECHANABILITY 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.
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