

Revision Date: 2022-07-11

# KH9012

#### **Product Description:**

KRYLEX<sup>®</sup> KH9012 is a moisture curing polyurethane hot-melt adhesive/sealant formulated for strong adhesion to plastic and metal substrates. It provides excellent jettability and fast curing speeds for high UPH assembly processes.



#### **Product Features**

- High green strength
- Fast curing
- Excellent drop resistance and shock absorption
- Excellent multi-substrate adhesion
- Excellent jettability
- Low bondline bubble formation

#### **Cure Notes**

- Rate of curing varies based on heat/humidity levels
- At least one of the bond substrates must be moisture transmitting to develop good adhesion strength
- Cure profile and final adhesion properties are dependent on bond-line thickness

UNCURED PROPERTY	VALUE	TEST METHOD
Viscosity at 120°C (Cps)	2,400	Rheometer, 20s-1
Open Time*	3-6min	N/A
Appearance	Amber	N/A

\*Minimum amount of time after adhesive is dispensed for building green strength (handling strength, 50 psi)

CURED PROPERTY	VALUE	<b>TEST METHOD</b>
Tensile Modulus (MPa)	18	ASTM D638
Elongation, %	900	ASTM D638
Shore Hardness	45D	ASTM D2240
Glass Transition Temp. (°C)	69	ASTM E1640
Storage Modulus (25°C, MPa)	252	ASTM E1640
Storage Modulus (85°C, MPa)	12	ASTM E1640



# Lap Shear Properties ASTM D1002

SUBSTRATE	Max Force (MPa)
PC – PC	29.3
PC – Stainless Steel	10.4
PC – Al	10.0
ABS – ABS	14.2
PC – PBT	10.6
PC – Nylon	12.1

Half inch, 5 mil bond thickness cured 1 week at ambient conditions

## **General Information**

For safe handling of this product consult the Safety Data Sheet.

### **Directions for Curing**

- 1. KH9012 is sensitive to moisture. Store in moisture resistant container.
- 2. Do not exceed temperatures above 135°C and pressure above 60 psi during dispense. Use only dry air or Nitrogen during dispense.
- 3. All bond surfaces should be clean and free from grease, mold release or other contaminants.
- 4. Cure speed is dependent on the heat and humidity levels, the moisture transmission of substrate and required depth of cure.
- 5. Bonded parts should be allowed to cool before testing or subjecting to any service loads.
- 6. Plastic grades and part design should be considered to avoid cracking and improve adhesion.
- 7. Avoid over-heating or applying excess pressure during dispense process.

# Handling and Safety

For maximum shelf life, keep containers sealed and store in dry conditions. Keep out of the reach of children. Uncured adhesive contains free isocyanates, and it is very important to follow the safety and handling guidelines. Use heat resistant gloves for handling hot syringes. Appropriate eye wear and protective equipment is required during the usage of uncured material. Refer to SDS for further information.



## NOTES

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