



KD7009

Product Description:

KRYLEX® KD7009 is a fast UV and heat curing, dark gray tinted adhesive, developed for adhesion to various substrates. The secondary heat curing enables bonding dark areas where light is not able to reach. The product is designed for use in active alignment in camera module assembly.

Product Features

- One component dual cure adhesive
- Fast UV Cure (within 2sec)
- Heat cure at 80°C in 30min or at 60°C in 60min
- Long working time
- Excellent multi-substrate adhesion
- Low shrinkage
- Extended room temperature stability
- High thixotropy

Cure Notes

- 365 nm LED cure 1,000 mw/Cm² with 2 seconds
- Secondary heat cure 80°C in 30min or 60°C in 60min

UNCURED PROPERTIES	VALUE	TEST METHOD
Color	Dark Grey	N/A
Viscosity (cps)	28,000	Rheometer, 20s-1
Thixotropic Index (2/20s-1)	5.9	N/A
Gravity Density	1.42	N/A
Work Life @25°C, <25% viscosity increase, Days	7 days	N/A

CURED PROPERTIES	VALUE	TEST METHOD
Tensile Modulus (MPa)	14.3	ASTM D638
Elongation, %	17.8	ASTM D638
Shore Hardness	70	ASTM D2240
Tg, °C	37	ASTM E1545
Water Absorption, %	0.19	ASTM D570
Volume Shrinkage, %	4.12	ASTM C1241
Linear Shrinkage, %	1.83	N/A
Storage Modulus (25°C, MPa)	1,400	ASTM E1640

Lap Shear Properties ASTM D1002

Substrate	Max Force (MPa)
PC – PC	4.1
PC – LCP	4.5
PC-AL	5.3
Glass – Glass	3.9*
SUS – SUS	13.5

0.5 in overlap with 5 mil bond thickness cured at 800C @ 30mins

*Substrate Failure

General Information

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

Directions for Curing

1. KD7009 is sensitive to light & heat. Store in light blocking refrigerated container.
2. Dispensing lines must be opaque to UV and Visible light
3. All bond surfaces should be clean and free from grease, mold release or other contaminants.
4. Cure speed is dependent on the light intensity and the light transmission of the substrates.
5. Bonded parts should be allowed to cool before testing or subjecting to any service loads.
6. Check lamp intensity regularly. Replace if lamp output is below 75% of initial intensity.

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

All test data, recommended procedures and other statements contained herein are furnished for information only for this experimental material and accuracy of the information is not guaranteed. Chemence cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. Considering the foregoing, Chemence specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Chemence products. Chemence specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Chemence patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent application

