

Description

UV 767-2 is a medium viscosity fast cure UV or visible light curable acrylate system. The cured material has good toughness and good adhesion to a variety of substrates including glass, metal and plastics. It is stable at room temperature, and thus eases for shipment and storage.

Features

- Medium viscosity
- 12 months shelf life at room temperature
- **Pass MSL 85°C/85%RH 1000 hours without delamination**

Applications

- UV or visible light curable adhesive for plastics and glass.

Uncured Properties	Typical Value	Unit	Test Method
Color	Translucent yellowish	-	PEN 10
Viscosity at 25°C, CP25-1, 667s ⁻¹	3750	cP	PEN 144
Thixotropic index	1.37		PEN 144
Shelf life at 25°C	12	month	PEN 26
45° incline flow test, 25°C, 30min	8	mm	PEN 15
Cured Properties*	Typical Value	Unit	Test Method
Hardness	81	Shore D	ASTM D2240
Glass transition temperature	50	°C	ASTM D7028-07
CTE, α -1	68	ppm/K	ASTM E831-03
Storage modulus at temperature			
a) -40°C	2272	MPa	ASTM D4065-12
b) 30°C	1272	MPa	ASTM D4065-12
c) 100°C	46	MPa	ASTM D4065-12
Linear cure shrinkage	2.1	%	PEN 56
Operation temperature range	-55 to 150	°C	
Weight loss at 30°C-150°C	0.52	%	PEN 92
Thermal stability, 5% weight loss at	342	°C	PEN 92
Adhesion Properties	Typical Value	Unit	Test Method
Die shear strength_ UV LED 365 nm			
a) Ultem to PC	11	kgf/cm ²	PEN 93
b) Bare FR4 to PC	66	kgf/cm ²	PEN 93
c) Aluminium to PC	176	kgf/cm ²	PEN 93
Die shear strength_ 320-380 nm			
a) Bare FR4 to PC	71	kgf/cm ²	PEN 93
Die shear strength_ 320-500 nm			
a) Ultem to glass	13	kgf/cm ²	PEN 93
Die shear strength_ MSL 85°C, 85%RH, Bare FR4 to PC_ UV LED 365 nm			
a) 500 hours	61	kgf/cm ²	PEN 93

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Management System
ISO 9001:2015
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b) 1000 hours	71	kgf/cm ²	PEN 93
Die shear strength_ MSL 85°C, 85%RH, Bare FR4 to PC_ 320-380 nm			
a) 500 hours	71	kgf/cm ²	PEN 93
b) 1000 hours	81	kgf/cm ²	PEN 93

* The values above are tested based on batch to batch basis. These values are not used as a basis for preparing specifications.

* PEN is referring to Penchem's standard test method; ASTM is for test reference only.

* N/A is referring to not applicable.

* For hardness, TMA, DMA, TGA or any bulk size specimen preparation, the preparation is cured using a UV conveyor belt and operating between 300 and 2000 mW/cm² UVA. Exposure time will vary depending on thickness and light intensity. Typically, specimens are cured within 2 to 4 minutes. The specimen will be stored at 25C closed container for 1-3 days before subjected to tests.

Guideline of Use

Direction for use

- 1) This product may be dispensed with a variety of manual and automatic applicators or other equipment as required. The user is responsible to determine the suitability of the product for all intended uses.
- 2) For dispensing process, placed the thawed syringe on the dispensing equipment immediately. Care must be exercised to avoid air and contaminants entrapment into the adhesive.
- 3) It is recommended to use the product within work life. The work life is varies by difference environment condition and application.
- 4) The substrate should be clean and free from grease, mold release, or other contaminants prior to dispensing the adhesive.

Recommended Cure

Cure condition:

Wavelength (nm)	Intensity (mW/cm ²)	Time (sec)
365	2000	3-15
380-500	500 or above	10
320-380	300	3
Sun light		30

UV curing is a function of lamp type, intensity, mass and thickness of adhesive, distance of lamp to adhesive, and type of substrate. One of the substrates must transparent to lamp wavelength applied, to minimize light loss.

Storage & Shelf Life

This product has a 12 months shelf life from date of manufacturing, unless otherwise specified, when stored at 25±3°C in the original and unopened container.

Packaging

- 5 ml syringe
- 10 ml syringe
- 30 ml syringe

Other packaging enquiry, please contact our sales department.

Environment, Health & Safety

This product is intended for industrial use only. For more safety information, please refer to Product Safety Data Sheet (SDS).

General Information

All right reserved. This information in this document is subjected to change without notice.

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