



PRODUCT DESCRIPTION

ELITE-T3035 is UV-visible curable adhesive used for potting, sealing and bonding, cured resin has good adhesion to most plastics with excellent chemical resistance. ELITE-T3035 has strengthened adhesion on Polycarbonate, PET, PMMA, PVC and ABS. Cured adhesive is flexible and resist to vibration.

FEATURE

- Excellent Chemical Resistance for potting, sealing and bonding application
- Deep Cure, Low shrinkage
- Highly Toughened and impact resistance for drop test
- Resist to thermal cycling and thermal shock.

DIRECTION OF USE

1. Dispense adhesive directly on one surface of parts
2. Assembly the mating parts, make sure adhesive contact with parts.
3. Illumination by UV light till cure.

Light source is recommended medium pressure mercury UV lamp with intensity 100mW/cm² (min. 50mW/cm²). Resin Cure on mean peak light wavelength 375nm, light source contains wavelength 220~250nm will helpful for surface dry, and 400~430nm provide higher depth of cure. Cure speed depended on the intensity of UV source, thickness of adhesive layer, thickness of material and depth of cure.

PHYSICAL PROPERTIES

Appearance	Clear liquid (slight yellow)
Chemical base	Urethane Acrylic
Specific Gravity [g/cm ³]	1.05 at 25°C
Flash Point [°C] (TCC)	>95
Viscosity [cps] at 25°C (Brookfield RVT, #4 spindle, 30 rpm)	18000 cp Thixotropic.

CURE CONDITIONS

Data test based on glass to steel bonding using 100 mW/cm² medium pressure mercury UV light source:

Cure time : 7~15 sec.

Depth of cure [mm]	8.5 mm
Wavelength range for cure	215~438nm

CURED PERFORMANCE

Cure Condition: 40 seconds, medium pressure mercury lamp (UV Light intensity 100mW/cm² in wavelength 365nm)

Break elongation [%]	259%
Shore hardness (ASTM D2240)	A46
Shear Strength [psi] (ASTM D-4501)	1,200
Impact Resistance@steel	>23 ftlbs/in ²
Temperature range for use	-50 to +150 °C
Coefficient of thermal expansion (ASTM D696) (TMA method)	13x10 ⁻⁵
- below Tg	28x10 ⁻⁵
- above Tg	

Refractive Index	1.52
Water absorption [%] (ASTM D570)	1.6%
Surface resistance [Ω] (ASTM D149)	1.7x10 ⁸
Dielectric strength [kV/m] (ASTM D257)	25

Material Adhesion Reference

Substrates	Recomm.
Polycarbonate	E
Polyimide	E
ABS	E
PMMA(acrylics)	E
Glass	G
Stainless steel	x
Aluminum	G
PET	E
APET	E
Copper	G
PVC	E
Nylon	E

PERFORMANCE OF CURED RESIN

Cure Condition: 40 seconds, medium pressure mercury lamp
(UV Light intensity 100mW/cm² in wavelength 375nm).
Joint parts material: Abraded Steel to glass (IPA wiped)
controlled gap < 0.005" (0.012 mm)

TENSILE SHEAR STRENGTH TEST

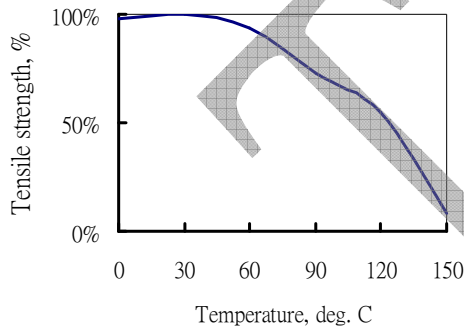
Illumination 60sec. Light Intensity: 100mW/cm², Test on 24 hours after bonding of specified material.

Join part material	value
PC to PC (IPA wiped)	*890
PC to PVC (IPA wiped)	*1280
PC to ABS (IPA wiped)	*910
Polyimide to ABS (IPA wiped)	1150
Polyimide to Glass	985
PMMA to PMMA (IPA wiped)	*1230
PETP to PETP (IPA wiped)	375
PC to aluminum	1650

* : Material Broken

ENVIRONMENTAL TEST -TEMPERATURE RESISTANCE

% of tensile shear strength retained in specified temperature
(ASTM D1002)



ENVIRONMENTAL TOLERANCE

Percent of Original Strength Retained (Glass-Glass)

ENVIRONMENT	RETAINED % PSI	CONDITION
Dry Heat	100	95°C, 2 weeks
Wet Heat	100	45°C, 95%RH, 1 week
Boiling Water	100	2 hours
Water Immersion	100	25°C, 1 week
90% Isopropanol Immersion	76	25°C, 24 Hours

NOTE: E = Excellent ; G = Good; X : not recommended

STORAGE

ELITE-T3035 is Light sensitive product. Should be stored in dry cool and dark area. Keep away from heat and light source to obtain maximum shelf life. Do not expose on sunlight directly. Improper storage may result in slow curing and possible thicken of adhesive.

Shelf Life : 12 months at 8~18°C unopened container.

STANDARD PACKAGES

50ml black bottle
250ml black bottle
1kg black bottle

HEALTH AND SAFETY

IRRITANT: Product is for "Industrial use" which contains acrylic oligomer, monomers and photoinitiator. May cause sensitization dermatitis (skin rash) to allergic persons, avoid to contact with skin and eyes. In case of contact with the skin, wash immediately with plenty of water for at least 15 minutes, for eyes, get medical attention.

FIRST AID: In case of contact with the skin, wash immediately with plenty of water for at least 15 minutes, for eyes, get medical attention

See Safety Data Sheet for full details.



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