



Technical Data Sheet

Light-Curable Adhesives, Sealants, and Masks

Product 7631

Rapid curing, UV adhesive for acrylic display assembly. Forms strong, crystal clear, and bubble-free bonds.

Tangent Product 7631 is a UV / Visible light curable adhesive that forms high tensile-shear bonds between PMMA surfaces. This is a solvent-free formulation. Its low viscosity facilitates bubble-free dispensing and effective surface wetting through capillary action. When cured, Product 7631 is clear, hard, and possesses a dry, tack-free surface. This product resists yellowing with age. Product 7631 cures extremely quickly with broad spectrum UV lamps (320-450 nm), as well as monochromatic LED lamps. Optimal LED curing is achieved using systems with outputs of 365nm or 405nm. Product 7631 is well suited for the assembly of light duty acrylic displays, plaques, trophies, ornaments, and other acrylic component assembly.

UNCURED PROPERTIES

COMPOSITION	Urethane Acrylate / Monomer Blend
VISCOSITY	100 – 300 cps at 25° C.
APPEARANCE	Clear liquid with slight yellow tint
SPECIFIC GRAVITY	1.1 -1.2 at 25° C.
FLASH POINT	200° F.
TOXICITY	Refer to Material Safety Data Sheet
SHELF LIFE	One Year

CURED PROPERTIES

DUROMETER	Shore D 75 - 85
WATER ABSORPTION	9% (24 hour immersion)
TEMPERATURE RANGE	-30° C. – 120° C.

**THE VALUES NOTED IN THIS TECHNICAL DATA SHEET ARE TYPICAL PROPERTIES.
THEY ARE NOT INTENDED TO BE USED AS PRODUCT SPECIFICATIONS.**

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CURE DATA / GUIDELINES [Glass substrates, 0.002-0.004 inch (0.050-0.100mm) bond gap, time in seconds]

Honle UVAHand 250, Flood Curing System	320-450 nm @ 2000 mW/cm ²	2	seconds
Honle Spot 100 LED, Flood Curing System	405 nm @ 250 mW/cm ²	4 - 6	seconds
Honle Bluepoint 4, Spot Curing System	320-450 nm @ 2000 mW/cm ²	2	seconds

Note: Actual cure rate in a production environment is dependent upon light source intensity, bond line distance from the light source, bond line gap or required depth of cure, and percentage of light transmission through the substrate covering the bond line. Please consult with Tangent Applications Engineering for assistance with curing equipment selection and process optimization.

PACKAGING OPTIONS - Standard packaging for this product includes 10 and 30 gram syringes, 300 gram cartridges, one kilogram bottles, and 17 kilogram pails. Other packaging options may be available upon request

Storage – This is light sensitive material. Containers must remain covered when not in use. Minimize exposure of uncured material to daylight, artificial light, and UV light during storage and handling. Store uncured product in its original, closed container in a dry location. Unless otherwise indicated on the product label, optimal storage temperatures are 10 to 30°C, (50 to 86°F). Any material removed from the original container must not be returned to the container as it could be contaminated. Tangent Industries cannot assume responsibility for products that were improperly stored, contaminated, or repackaged into other containers.

Handling and Clean-Up – For safe handling information, consult this product's Material Safety Data Sheet (MSDS) prior to use. Uncured material may be wiped away from surfaces with organic solvents. Do not use solvents to remove material from eyes or skin!

Using the Product – Prior to dispensing, ensure that each surface coming in contact with this product is clean and free of grease, mold release, or other contaminants. Dispense directly from the package, or utilize appropriate dispensing equipment that is compatible with light-curable adhesives and coatings. Fluid lines and dispense tips must be 100% light blocking. Curing stations should be equipped with air exhaust systems to evacuate vapors and heat generated during the curing process. After curing, this product must be allowed to cool to ambient temperature before testing the product's performance.

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