

## FACTS & SPECIFICATIONS

### SIZE AVAILABILITY

PRODUCT	FIRST SURFACE COATING	SECOND SURFACE COATING	THICKNESS	SIZE	APPROXIMATE WEIGHT/SHEET
TruLife® Anti-Reflective Digital Acrylic	Anti-Reflective, Abrasion-Resistant Coating	Specialized Coating to Enhance Ink Adhesion	3.0mm (1/8")	48"x96" (2,438mmx 1,219mm)	22lbs (9.98kg)
			6.0mm (1/4")	48"x96" (2,438mmx 1,219mm)	44lbs (19.96kg)
TruLife® Anti-Reflective Standard Acrylic	Anti-Reflective, Abrasion-Resistant Coating	None	3.0mm (1/8")	48"x96" (2,438mmx 1,219mm)	22lbs (9.98kg)
			3.0mm (1/8")	60"x120" (3,048mmx 1,524mm)	35lbs (15.87kg)

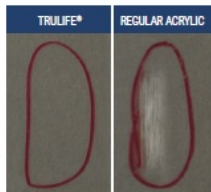
### ANTI-REFLECTIVE COATING

- Anti-reflective coating on first surface (viewing side).
- Light reflection is reduced to less than 1.5% when mounted/direct printed.\*
- Magnetron sputtered coating helps ensure maximum durability and strength.

- Thin film coatings bonded to substrate at an atomic level.
- Utilizes crystal clear UV filtering extruded acrylic sheet.
- Transmitted color appears color neutral.

\* The anti-reflective coating is designed to perform when viewed at a 90 degree angle. Beyond that, reflections may become visible in a subtle greenish/blue color and certain lighting conditions may make this more noticeable. This product is not anti-reflective in picture framing applications. TruLife Acrylic is for direct print and face mount applications only.

### ABRASION RESISTANT



- TruLife Acrylic will stand up to the wear and tear of high traffic areas and frequent cleaning.
- Acrylic sheet with hard coated, abrasion resistant first surface (viewing side).
- Coating offers up to 20 times the protection against minor scratches compared to uncoated acrylic.
- Coating shows no damage after 600 dry cloth rubs.

Technical Standards: MIL-C-14806A, para 4.4.7 & MIL-M13508C, para 4.4.5

### ELECTRICAL SURFACE RESISTIVITY (ANTI-STATIC)

- Long lasting anti-static protection on first surface (viewing side).
- The surface resistivity is less than  $10^{12}$  ohm/sq at 50% Relative Humidity.
- Our anti-static protection actually exceeds that of glass and is engineered to immediately dissipate static charges.

- Independent tests show that our coated high-performance glazing products are up to 2,000 times more anti-static than regular acrylic.
- Does not attract dust – minimizes cleaning.

Technical Standards: ASTM D257

### WARRANTY

Tru Vue sheets are backed by a 10 year limited warranty for meeting the specifications provided in this document.



## TECHNICAL DATA

PHYSICAL CHARACTERISTICS	Substrate	Clear, UV filtering extruded acrylic. First surface anti-reflective, abrasion-resistant coating. TruLife Anti-Reflective Digital Acrylic has specialized second surface coating to enhance adhesion for inks.
Thickness Consistency	±5% (i.e., 6mm ±0.3mm)	Most uniform consistency of acrylic substrates.
Product Identification	Protective film masking on both sides, plus a product identification tape. The product identification tape will be on the anti-reflective side, which has blue masking, and labeled with "PRINT/MOUNT TO OPPOSITE SIDE" to identify the printable/mountable side.	
SPECIFICATIONS	UV Protection 300-380nm	99%
Light Transmission, Total ASTM D-1003	>94% (unmounted) / >98% (mounted/direct printed)	
Light Reflection/Double-Sided Anti-Reflection Haze ASTM D-1003	<5% (unmounted) / <1.5% (mounted/direct printed)	
Accelerated Aging Q-sun Xenon Arc Test	Anti-reflective, anti-static, UV protection and light transmission remain unchanged after 2,000 hours (estimated to be approximately 100 years) of Q-sun Xenon arc testing at exposure intensity of 100,000 Lux.	
PERFORMANCE DATA	Tensile Strength Modulus of Elasticity ASTM D-638	10,000 - 11,030 psi 400,000 - 490,000 psi
Flexural Strength Modulus of Elasticity ASTM D-790	17,000 psi 480,000 - 490,000 psi	
Impact Strength - Izod Milled Notch ASTM D-256	0.28 - 0.4 ft. lbs./in of notch	
Impact Strength - Gardner - Falling Weight ASTM D-420-04	18.1 ft-lbs (6.0mm) acrylic glazing products are significantly more impact-resistant than annealed glass and similar to that of tempered glass. If subject to impact beyond the limit of resistance, it does not shatter into small slivers, but breaks into larger pieces.	
Humidity Resistance MIL-C-48497A, para 4.5.3.2	No deterioration of coating after 48 hours @ 50°C, 95% RH	
Corrosion Resistance (Salt Fog) ASTM B117 & B-368-03 & B368-97	Passed 48 hr. No Deterioration 50°C, 95% RH After exposure for 7 - 24 hr cycles (168 hours), the coating shows no damage	
RoHS Compliance Testing	Passed (Dangerous substance testing: presence of Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent chromium (Hex-Cr))	
Photographic Activity Test ISO 18916 & ISO 18902	Passed ISO 18902 Overall performance. Meet "Photo-safe" per ISO 18902 section 3.9. ISO 18916 Silver Image Interaction • Gelatin Staining • Mottling of Image • Interaction Detector Overall performance	
Coating Adhesion (Snap Tape) MIL-C-48497A, para 4.5.3.1	The anti-reflective coating shows no damage after snap removal of tape.	
Solubility MIL-C-48497A	After a 24-hour immersion or exposure at room temperature (60°-90°F), the anti-reflection coating shows no deterioration in the following solutions: • Distilled Water • Saline Solution (170gm of NaCl per 3.8 liters of water) • Acetone • Ethyl Alcohol • Isopropyl Alcohol • Coffee • Coke.	
TEMPERATURE AND FLAMMABILITY	Flammability Self-Extinguish UV945VA & 5VB	Acrylic glazing products are combustible. Precautions should be taken to protect this material from flames and high heat sources.
Flammability Self-Ignition Temp. ASTM-D-1929	830 - 833°F / 443 - 445°C	
Flame Spread Index / Smoke Developed Index, ASTM E-84	115 / 550	
Horizontal Burning Test Avg. Burn Rate ASTM D-635	1.0 - 1.019 in./min / 2.5 cm/min (3mm)	
Smoke Density ASTM D-2843	3.4 - 6.4% (3mm)	
UL 94 Rating	94HB	
Deflection Temp. (264 psi load) ASTM D-648	203 - 210°F / 95 - 99°C	
Vicat Softening Point ASTM D-1525	210 - 220°F / 99 - 105°C	
Max. Continuous Service Temp.	170 - 190°F / 77 - 88°C	
Coefficient of Thermal Expansion ASTM D-696	0.00003 - 0.00004 in/in °F / 0.000054 - 0.000072 m/m °C	
Water Vapor Transmission Rate (@ 50% R.H.)	0.014 gm/100 in <sup>2</sup> × day TruLife Acrylic performs like regular uncoated acrylic in response to changes in relative humidity.	
APPLICATION RECOMMENDATIONS	Space Expansion and Contraction	For indoor applications where temperature remains fairly constant, please allow approximately 1/16" (1.6mm) per 12" (305mm) of length for each 20 degrees F (11 degree C) temperature change. In conditions of extreme humidity or temperature, greater allowances may be necessary.
Edge Polishing	We recommend that you test any sand and buff method or edge finisher before mounting or printing to see if any crazing occurs. Flame polishing is not recommended as extreme heat can cause crazing, which may lead to delamination of the coating.	
Outdoor Durability	Not recommended for outdoor use.	

# TECHNICAL SHEET



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