



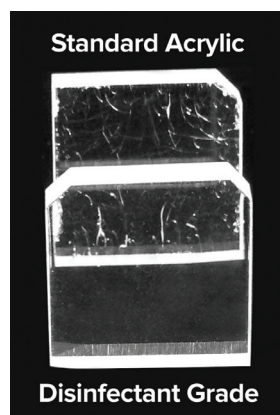
Polycast[®] DG Disinfectant Grade Cast Acrylic

PRODUCT DESCRIPTION

Polycast[®] DG disinfectant grade cast Acrylic Sheet is a highly specialized, UV-stable material that does not support microorganism growth and resists crazing when exposed to repeated applications of harsh alcohol-based (or other) disinfectants. Since Polycast[®] DG is inherently anti microbial, it does not support microorganism growth. It's also designed to be monolithic, impenetrable and easily cleanable with disinfectants.

VALUE SOLUTION

Minimize disinfectant-related failures while maintaining material performance, clarity, and durability. Acrylic surfaces in hospitals and medical facilities must be able to withstand increasingly potent disinfectants, which often cause micro-cracks and crazing after frequent use. These surfaces need to be able to tolerate different disinfectant strengths and exposure levels in a variety of environments.



Samples were immersed in 80% IPA / 20% EA for 24 hours.

Polycast DG cast acrylic sheet is specially formulated to withstand harsh chemicals, such as alcohol disinfectants, often used in healthcare settings. It is more resistant to chemical attack compared to standard acrylic material, plus this high performing cast acrylic tolerates repeated applications of disinfectants and maintains surface clarity, visual appeal and original strength.

KEY CHARACTERISTICS

- Enhanced chemical resistance, including to alcohols commonly used in disinfectants including bleach solutions such as Clorox and ammonia solutions
- Resistance to crazing better than general purpose acrylic
- Meets or exceeds all requirements of the ASTM D4802 standard
- Maintains clarity and beauty of surface – endures cleaning and disinfecting without hazing or discoloration
- Available in clear or a wide range of colors, including custom colors

Note: Due to a variety of chemicals used in disinfectants, users need to evaluate the materials within their unique conditions.

TARGET MARKET AND APPLICATIONS

Polycast® DG is recommended for hospitals, medical offices and long-term care facilities, or other environments where frequent and repeated applications of disinfectants occur. Typical applications include:

- Acrylic physical barriers
- Display cases
- Storage units and cabinets
- Signage
- Incubators
- Medical equipment

TECHNICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE	UNITS
Luminous Transmission	ASTM D1003	92	%
Haze	ASTM D1003	0.5	%
Yellowness Index	ASTM D1925		
UV Transmission Below 370mm	Spectrophotometer	0	%
Refractive Index	ASTM D542	1.49	—
Specific Gravity	ASTM D792	1.19	—
Tensile Strength	ASTM D638	11000	psi
Elongation at Break	ASTM D638	6	%
Deflection Temperature Under Load (264 psi)	ASTM D648	92	C
Thermal Expansion Coefficient	ASTM D966	0.00004	in/in/deg F
Flammability	ASTM D635	1.2	in/min
Impact Strength	ASTM D256 (A)	0.3	ft/lb/in
Water Absorption (24 hr)	ASTM D570	0.3	%
Shrinkage after Thermoforming (Linear)	—	2	%
100% Alcohol Immersion	ASTM D4802, Category A - IPA	No craze visible	—
Critical to Stress Craze (IPA)	Cantilever Stress Craze Test, 30 min	2,000	psi