

ACRYLITE® M30

Polymethyl Methacrylate Acrylic

Evonik Cyro LLC

PROSPECTOR®

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Technical Data

Product Description

ACRYLITE® M30 acrylic polymer is an amorphous thermoplastic molding compound based on polymethyl methacrylate (PMMA).

Typical properties of ACRYLITE® acrylic polymers are:

- excellent weather resistance
- high light transmission
- high mechanical strength
- high surface hardness and mar resistance
- good melt flow rate
- versatile colorability due to crystal clarity

The special properties of ACRYLITE M30 polymer are:

- medium heat resistance
- high melt flow rate
- UV light transmitting
- medium levels of lubricant

Application:

Used for injection molding optical and technical parts.

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
UL Yellow Card ²	• E54671-244575		
Search for UL Yellow Card	• Evonik Cyro LLC • ACRYLITE®		
Availability	• North America		
Additive	• Lubricant		
Features	• Amorphous • Good Colorability • Good Flow • Good Weather Resistance	• High Clarity • High Hardness • High Strength • Lubricated	• Medium Heat Resistance • Scratch Resistant
Uses	• Decorative Displays • Engineering Parts • Lenses	• Lighting Applications • Medical/Healthcare Applications • Optical Applications	• Piping
Agency Ratings	• EC 1907/2006 (REACH)		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.19 g/cm ³	ASTM D792
Apparent Density	0.66 g/cm ³	ASTM D1895
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	24 g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.30 to 0.60 %	ASTM D955
Water Absorption (Equilibrium)	< 0.30 %	ASTM D570
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	3240 MPa	ASTM D638
Tensile Strength	63.4 MPa	ASTM D638
Tensile Elongation		ASTM D638
Yield	2.0 to 4.0 %	
Break	2.0 to 4.0 %	



Mechanical	Nominal Value Unit	Test Method
Flexural Modulus	3170 MPa	ASTM D790
Flexural Strength	107 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C, 6.35 mm)	19 J/m	ASTM D256
Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)	89	ASTM D785
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Annealed, 6.35 mm	82.2 °C	ASTM D648
Vicat Softening Temperature	90.0 °C	ASTM D1525
CLTE - Flow (0 to 156°C)	7.2E-5 cm/cm/°C	ASTM D696
Optical	Nominal Value Unit	Test Method
Transmittance (3200 µm)	92.0 %	ASTM D1003
Haze (3200 µm)	< 1.0 %	ASTM D1003
Yellowness Index (3.20 mm)	< 1.0 YI	ASTM D1925

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.



Where to Buy

Supplier

Evonik Cyro LLC
Parsippany, NJ USA
Telephone: 800-631-5384
Web: <http://www.acrylite-polymers.com>

Distributor

Amco Polymers
Telephone: 800-262-6685
Web: <http://www.amcopolymers.com/>
Availability: North America

Channel Prime Alliance
Telephone: 800-247-8038
Web: <http://www.channelpa.com/>
Availability: North America

Nexeo Solutions
Telephone: 888-594-6009
Web: <http://www.nexeosolutions.com/>
Availability: North America

