ACRYLITE® Heatresist hw55

Polymethyl Methacrylate Acrylic

Evonik Cyro LLC

Message:

ACRYLITE® Heatresist hw55 acrylic polymer is a copolymer based on methyl methacrylate (MMA) with comonomer constituents for injection molding applications.
Typical properties of ACRYLITE® Heatresist 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® Heatresist hw55 polymer are:
high heat resistance
high melt strength
improved resistance to isopropyl alcohol
AMECA listed
Application:
Used for injection molding of technical parts for applications subjected to high thermal stress.

General Information	
UL YellowCard	E54671-100101688
Features	Copolymer
	Good Colorability
	Good Flow
	Good Melt Strength
	Good Weather Resistance
	High Clarity
	High Hardness
	High Heat Resistance
	High Strength
	Scratch Resistant
Uses	Automotive Applications
	Engineering Parts
	Lenses
	Optical Applications
Agency Ratings	EC 1907/2006 (REACH)
Appearance	Clear/Transparent
Forms	Pellets
Processing Method	Extrusion
	Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.19	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	1.3	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.90 to 1.0	%	ASTM D955
Water Absorption (Equilibrium)	< 0.30	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	100		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	3790	MPa	ASTM D638
Tensile Strength	86.2	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	2.0 to 4.0	%	
Break	2.0 to 4.0	%	
Flexural Modulus	3450	MPa	ASTM D790
Flexural Strength	137	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C, 6.35 mm)	13	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Annealed, 6.35 mm)	106	°C	ASTM D648
Vicat Softening Temperature	119	°C	ASTM D1525
CLTE - Flow (0 to 156°C)	1.0E-4	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

Recommended distributors for this material

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