Plexiglas® V825NA

Polymethyl Methacrylate Acrylic

Altuglas International of Arkema Inc.

Message:

Plexiglas® V825NA is a thermoplastic acrylic resin formulated for injection molding and extrusion applications. This grade is the same as Plexiglas®V825 but does not have additives such as mold release, toner or UV-stabilizer. It has the same high heat resistance and high melt flow Plexiglas®V825. Plexiglas® V825NA has excellent optical properties allowing it to excel in applications requiring high quality surface appearance and/or precision optics. Plexiglas® V825NA has good thermal stability, extrusion melt strength, and excellent tool surface reproduction. It has excellent resistance to many chemicals including solutions of inorganic acids, alkalis and aliphatic hydrocarbons such as VM&P naphtha and heptane. Additionally, it is virtually unaffected by a wide range of commercial products including many beverages, foodstuffs, detergent solutions and cleaners.

General Information	
Features	BPA Free
	Good Color Stability
	Good Dimensional Stability
	Good Thermal Stability
	Good Weather Resistance
	High Clarity
	High Heat Resistance
	High Scratch Resistance
	Low Shrinkage
Uses	Lighting Diffusers
	Optical Applications
RoHS Compliance	RoHS Compliant
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)	3.7	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.20 to 0.60	%	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	93		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	3100	MPa	ASTM D638
Tensile Strength (Yield)	70.3	MPa	ASTM D638
Tensile Elongation (Break)	6.0	%	ASTM D638

Flexural Modulus	3100	MPa	ASTM D790
Flexural Strength (Yield)	103	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	16	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load [1]			ASTM D648
0.45 MPa, Annealed	105	°C	
1.8 MPa, Annealed	102	°C	
Vicat Softening Temperature			
--	111	°C	ASTM D1525 [2]
--	104	°C	ASTM D1525 [3]
Thermal Conductivity	0.19	W/m/K	ASTM C177
Flammability	**Nominal Value**		**Test Method**
Flame Rating	HB		UL 94
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index [4]	1.490		ASTM D542
Transmittance (3180 µm)	92.0	%	ASTM D1003
Haze (3180 µm)	< 1.0	%	ASTM D1003
Additional Information	**Nominal Value**		**Test Method**
ASTM Classification	PMMA 0141V3		ASTM D788
NOTE			
1.	Annealing cycle: 4hrs @ 203°F		
2.	Rate A (50°C/h), Loading 1 (10 N)		
3.	Rate A (50°C/h), Loading 2 (50 N)		
4.	ND @ 72°F		

Recommended distributors for this material

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