NAS® 36

Styrene Methyl Methacrylate Acrylic Copolymer

Styrolution

Message:

NAS 36 is a styrene acrylic copolymer that can be used in a variety of applications demanding a strong, stiff water-clear plastic resin with excellent thermal and indoor UV light stability.

General Information			
UL YellowCard	E55776-245678		
Features	Copolymer Good Mold Release Good Processability Good Stiffness Good Thermal Stability Good UV Resistance High Clarity Low Density		
Uses	Appliances Displays Toys		
Appearance	Clear/Transparent		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.09	g/cm³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	2.2	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	30.0	cm³/10min	ISO 1133
Molding Shrinkage			
Flow	0.20 to 0.60	%	ASTM D955
--	0.20 to 0.60	%	ISO 294-4
Water Absorption			
Saturation, 23°C	0.15	%	ASTM D570
Equilibrium, 23°C, 50% RH	0.15	%	ISO 62
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	75		ASTM D785
Ball Indentation Hardness	169	MPa	ISO 2039-1
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			
--	3240	MPa	ASTM D638

--	3300	MPa	ISO 527-2
Tensile Strength			
Yield, 23°C	60.7	MPa	ASTM D638
Yield, 23°C	60.0	MPa	ISO 527-2
Tensile Elongation			
Break	2.3	%	ASTM D638
Break, 23°C	2.5	%	ISO 527-2
Flexural Modulus			
--	3170	MPa	ASTM D790
--	3400	MPa	ISO 178
Flexural Strength			
--	101	MPa	ASTM D790
--	100	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	1.5	kJ/m^2	ISO 179
Charpy Unnotched Impact Strength (23°C)	12	kJ/m^2	ISO 179
Notched Izod Impact			
23°C	21	J/m	ASTM D256
23°C	2.5	kJ/m^2	ISO 180/A
Unnotched Izod Impact Strength	12	kJ/m^2	ISO 180
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, Unannealed	90.0	°C	ISO 75-2/B
1.8 MPa, Annealed	80.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	104	°C	ASTM D1525 [1]
--	98.0	°C	ISO 306/B50
Maximum Service Temperature	260	°C	
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index [2]	1.560		ASTM D542, ISO 489
Transmittance (550 nm)	91.4	%	ASTM D1003
Haze	0.30	%	ASTM D1003
Injection	**Nominal Value**	**Unit**	
Drying Temperature	80.0	°C	
Drying Time	2.0	hr	
Rear Temperature	180 to 210	°C	
Middle Temperature	200 to 230	°C	
Front Temperature	210 to 240	°C	
Processing (Melt) Temp	200 to 240	°C	
Mold Temperature	30.0 to 60.0	°C	
Injection Rate	Slow-Moderate		
NOTE			

1.	Rate B (120°C/h), Loading 1 (10 N)
2.	Sodium D Line

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China