MAGNUM™ 275

ABS Resin

Trinseo

Message:

MAGNUM™ 275 ABS resin is a low gloss, low flow ABS resin with good impact. MAGNUM ABS resins are thermoplastic materials that provide an excellent balance of processability, impact resistance, and heat resistance as imparted by the various polymer compositions. MAGNUM ABS resins are available in a wide range of melt flow rates, impact strengths, and heat resistances for both high and low gloss applications manufactured by injection molding, sheet or profile extrusion, and thermoforming. MAGNUM ABS resins offer a wide range of processing abilities and impact resistance for low gloss injection molding applications. Combined with heat resistance, tensile and flexural strength, MAGNUM ABS resins are used in a wide variety of injection molding applications.
Applications
Injection molding applications
Extrusion and thermoforming applications
Complies with:
U.S. FDA 21 CFR 181.32
Consult the regulations for complete details.

General Information	
UL YellowCard	E54680-101898222
Features	Good Impact Resistance Good Processability High Heat Resistance Low Flow Low Gloss
Agency Ratings	FDA 21 CFR 181.32
Forms	Pellets
Processing Method	Extrusion Injection Molding Thermoforming

Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.04	g/cm³	ASTM D792
--	1050	kg/m³	ISO 1183 [1]
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	2.6	g/10 min	ASTM D1238
Melt volume-flow rate (220°C/10.0 kg)	9.00	cm³/10min	ISO 1133 [2]
Molding Shrinkage - Flow	0.40 to 0.70	%	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			
-- [3]	1830	MPa	ASTM D638
--	2000	MPa	ISO 527-2 [4]
Tensile Strength			
Yield [5]	37.2	MPa	ASTM D638

Yield	44.0	MPa	ISO 527-2 [6]
Break [7]	34.5	MPa	ASTM D638
Tensile Elongation			
Yield [8]	3.0	%	ASTM D638
Yield	2.6	%	ISO 527-2 [9]
Break [10]	100	%	ASTM D638
Nominal strain at break	30	%	ISO 527-2 [11]
Flexural Modulus [12]	2030	MPa	ASTM D790
Flexural Strength [13]	63.4	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy notched impact strength			ISO 179/1eA [14]
-30°C	9.00	kJ/m²	
23°C	22.0	kJ/m²	
Charpy impact strength			ISO 179/1eU [15]
-30°C	No Break		
23°C	No Break		
Notched Izod Impact [16]			ASTM D256
-18°C, 3.20 mm	130	J/m	
23°C, 3.20 mm	270	J/m	
Instrumented Dart Impact			ASTM D3763
-18°C, Peak Energy	32.8	J	
-18°C, 3.20 mm, Total Energy [17]	37.3	J	
23°C, Peak Energy	32.8	J	
23°C, 3.20 mm, Total Energy [18]	46.3	J	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	93.3	°C	ASTM D648
0.45 MPa	95.0	°C	ISO 75-2 [19]
1.8 MPa, Unannealed, 3.20 mm	79.4	°C	ASTM D648
1.8 MPa	85.0	°C	ISO 75-2 [20]
Vicat Softening Temperature			
--	107	°C	ASTM D1525
50°C/h, B (50N)	99.0	°C	ISO 306 [21]
CLTE - Flow	7.9E-5	cm/cm/°C	ISO 11359-2 [22]
Flammability	**Nominal Value**		**Test Method**
Flame Rating [23] (1.52 mm)	HB		UL 94
Burning Behav. at 1.6mm nom. thickn. (1.47 mm, UL)	HB		ISO 1210 [24]
NOTE			
1.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.		

2.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
3.	1000 mm/min
4.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
5.	Type I, 51 mm/min
6.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
7.	Type I, 51 mm/min
8.	Type I, 51 mm/min
9.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
10.	Type I, 51 mm/min
11.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
12.	Type I, 2000 mm/min
13.	Type I, 2000 mm/min
14.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
15.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
16.	0.25 mm Notch Depth
17.	3.39 m/sec
18.	3.39 m/sec
19.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
20.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
21.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
22.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
23.	This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.
24.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

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