Novodur® P2MC

INEOS Styrolution - Acrylonitrile Butadiene Styrene

Sunday, November 3, 2019

General Information

Product Description

Novodur® P2MC is an injection molding grade especially suitable for electroplating, providing high flowability.

FEATURES

- Electroplating grade
- High flowability
- Good impact resistance

APPLICATIONS

- Automotive grills
- Automotive trim
- Household appliances
- Various Sanitary Applicances

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Impact Resistance	• High Flow	• Platable
Uses	• Appliances • Automotive Applications	• Automotive Exterior Parts • Automotive Exterior Trim	
Automotive Specifications	• BMW GS 93016 • CHRYSLER MS-DB-197 CPN2220 • DAIMLER DBL 5416-01 • FORD WSK-M4D836-A	• FORD WSS-M4D836-B1 • FORD WSS-M4D836-B2 • GM GMW15572P-ABS-T5 Color: 000000 Natural • GM QK 002031 Color: 000000 Natural	• HONDA HES 251-99 • IMDS ID 626141 Color: 000000 Natural • PSA Peugeot-Citroën SPA X62 4512 • VOLKSWAGEN TL 528
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.03	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	25	cm³/10min	ISO 1133
Molding Shrinkage	0.20 to 0.70	%	ISO 294-4
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	319000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	5800	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	2.4	%	ISO 527-2
Tensile Strain (Break, 73°F)	> 15	%	ISO 527-2
Flexural Modulus (73°F)	305000	psi	ISO 178
Flexural Stress (73°F)	8990	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			
-22°F	7.6	ft·lb/in²	ISO 179
73°F	12	ft·lb/in²	ISO 179/1eA

Novodur® P2MC
INEOS Styrolution - Acrylonitrile Butadiene Styrene

Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength (-22°F)	71	ft·lb/in²	ISO 179/1eU
Notched Izod Impact Strength			ISO 180/A
-22°F	7.6	ft·lb/in²	
73°F	12	ft·lb/in²	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Ball Indentation Hardness	13200	psi	ISO 2039-1
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature [2] (66 psi, Annealed)	205	°F	ISO 75-2/B
Heat Deflection Temperature [2] (264 psi, Annealed)	201	°F	ISO 75-2/A
Vicat Softening Temperature			
--	203	°F	ISO 306/B50
--	208	°F	ISO 306/B120
CLTE - Flow	5.6E-5	in/in/°F	ISO 11359-1
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength (0.0394 in)	940	V/mil	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	3.00		
1 MHz	2.90		
Dissipation Factor			IEC 60250
100 Hz	5.0E-3		
1 MHz	8.0E-3		
Comparative Tracking Index	600	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Burning Rate (0.0787 in)	2.2	in/min	ISO 3795
Flame Rating (0.06 in)	HB		IEC 60695-11-10
Glow Wire Flammability Index (0.08 in)	1290	°F	IEC 60695-2-12

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	446 to 500	°F
Mold Temperature	140 to 176	°F
Injection Velocity	567	in/min

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 4h/80°C