

Product Texts

Symbol according to ISO 1043-1: ABS

Designation: Thermoplastics ISO 2580-ABS 1, MG, 105-04-16-20

Special low gloss grade for injection moulding which combines medium heatresistance with a good balance between stiffness and toughness.

Applications:

Main application for this grade is automotive interiors, for example dashboard instruments and panels, where a matt surface finish and high thermal resistance are highly desirable.

The choice of this material, when properly processed in tools having a suitable quality finish, can mean the elimination of subsequent painting operations with a consequent reduction in part costs, together with easier recycling.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	5	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
^[C] Density of melt	960	kg/m ³	-
^[C] Spec. heat capacity of melt	2150	J/(kg K)	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	1900	MPa	ISO 527
^[C] Yield stress	33	MPa	ISO 527
^[C] Yield strain	3	%	ISO 527
^[C] Nominal strain at break	>50	%	ISO 527
^[C] Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	150	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	15	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	8	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Glass transition temperature, 10°C/min	109	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	83	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	101	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 1MHz	3.1	-	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	150	E-4	IEC 62631-2-1
^[C] Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	1E14	Ohm	IEC 62631-3-2
^[C] Electric strength	30	kV/mm	IEC 60243-1
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.6	%	Sim. to ISO 62
^[C] Humidity absorption	0.2	%	Sim. to ISO 62
^[C] Density	1050	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
^[C] Processing conditions acc. ISO	2580	-	ISO-2
^[C] Injection Molding, melt temperature	250	°C	ISO 294
Injection Molding, mold temperature	60	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294
Injection Molding, pressure at hold	70	MPa	ISO 294

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Special Characteristics

Heat stabilized or stable to heat

Delivery form

Pellets

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Injection molding

Injection Molding

PREPROCESSING

Drying conditions:

Drying temperature 80 °C

Drying time 2 - 4 h

Maximum water content 0.2 %

PROCESSING

Typical processing temperature range:

Melt temperature 230 - 270 °C

Mold temperature 50 - 80 °C