

Product Texts

Clearlux® 816 is a Methyl Methacrylate Acrylonitrile Butadiene Styrene (MABS) polymer. The grade offers a unique combination of excellent flow, high impact strength, heat resistance and good colorability. Food contact statements are available on request.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	16	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
^[C] Density of melt	953	kg/m ³	-
^[C] Thermal conductivity of melt	0.192	W/(m K)	-
^[C] Spec. heat capacity of melt	2350	J/(kg K)	-
^[C] Ejection temperature	87	°C	-

[C]: CAMPUS

Mechanical properties

	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	1900	MPa	ISO 527
^[C] Yield stress	42	MPa	ISO 527
^[C] Yield strain	4	%	ISO 527
^[C] Nominal strain at break	7.2	%	ISO 527
^[C] Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	190	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	8	kJ/m ²	ISO 179/1eA
Ball indentation hardness	75	MPa	ISO 2039-1

[C]: CAMPUS

Thermal properties

	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	87	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	93	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	87	°C	ISO 306
Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties

	Value	Unit	Test Standard
ISO Data			
Dissipation factor, 100Hz	160	E-4	IEC 62631-2-1

Optical properties

	Value	Unit	Test Standard
ASTM Data			
Haze	2	%	ASTM D 1003

Other properties

	Value	Unit	Test Standard
^[C] Water absorption	0.7	%	Sim. to ISO 62
^[C] Density	1080	kg/m ³	ISO 1183
Bulk density	600	kg/m ³	-

[C]: CAMPUS

Processing Recommendation Injection Molding

	Value	Unit	Test Standard
Pre-drying - Temperature	70	°C	-
Pre-drying - Time	2	h	-
Melt temperature	220 - 250	°C	-
Mold temperature	44 - 70	°C	-
Injection speed	200	mm/s	-

Characteristics**Processing**

Injection Molding

Chemical Resistance

General Chemical Resistance

Delivery form

Pellets

Applications

Electrical and Electronical, Packaging, Toys

Special Characteristics

High impact or impact modified, Heat stabilized or stable to heat, Transparent

Regional Availability

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

Other text information**Injection molding**

PREPROCESSING

Pre-drying, Temperature: 70°C

Pre-drying, Time: 2h

PROCESSING

Melt temperature, range: 220 - 250°C

Mold temperature, range: 44 - 70°C