

CLEARLUX 816

Methyl Methacrylate Acrylonitrile Butadiene Styrene (MABS)

TECHNICAL DATASHEET

DESCRIPTION

Clearlux® 816 is a Methyl Methacrylate Acrylonitrile Butadiene Styrene polymer. The grade offers a unique combination of excellent flow, high impact strength, heat resistance and good colorability.

FEATURES

- High flow
- High impact
- Excellent transparency
- Good colorability
- Chemical resistance

APPLICATIONS

- Toys
- Pens
- Housing
- Cosmetic packaging
- Electric box cover

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm ³ /10 min	16
Melt Volume Rate, 220 °C/21.6 kg	ISO 1133	cm ³ /10 min	90
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	8
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m ²	no break
Tensile Stress at Yield, 23 °C	ISO 527	MPa	42
Tensile Strain at Yield, 23 °C	ISO 527	%	4
Tensile Modulus	ISO 527	MPa	1900
Tensile Strain at Break, 23 °C	ISO 527	%	20
Hardness, Ball Indentation	ISO 2039-1	MPa	75
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	87
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	87
Heat Deflection Temperature, B (0.45 MPa)	ISO 75	°C	93
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	80 - 100
Electrical Properties			

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Dissipation Factor (100 Hz)	IEC 62631-2-1	10 ⁻⁴	160
Optical Properties			
Refractive Index, Sodium D Line	ISO 489	-	1.54
Haze	ASTM D 1003	%	2
Other Properties			
Density	ISO 1183	kg/m ³	1080
Water Absorption, Saturated at 23 °C	ISO 62	%	0.7
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.7
Melt Temperature Range	ISO 294	°C	220 - 250
Mold Temperature Range	ISO 294	°C	44 - 70
Injection Velocity	ISO 294	mm/s	200
Drying Temperature	-	°C	70
Drying Time	-	h	2

Typical values for uncolored products

Please note that all processing data stated are only indicative and may vary depending on the individual processing complexities.

Please consult our local sales or technical representatives for details.

SUPPLY FORM

Clearlux® is delivered in the form of cylindrical or spherical pellets. The bulk density of the pellets is from 0.55 to 0.65 g/cm³. In dry areas with normal temperature control, Clearlux® pellets can be stored for relatively long periods of time without any change in mechanical properties. Avoid direct exposure to sunlight. Under poor storage conditions, Clearlux® may absorb low amounts of moisture, but this can be removed easily by drying.

PROCESSING

Clearlux® is primarily processed through injection molding but any process suitable for thermoplastic molding compositions may also be used.

PRODUCT SAFETY

Detailed information can be found in the Clearlux® safety data sheets.

DISCLAIMER

The above mentioned data are accurate to the best of our knowledge. They are based upon reputable labs and industry standard testing methods. These are only typical values and actual product specification may deviate at industrial range. Therefore, no data in this technical data sheet shall constitute a warranty or representation regarding product features, fitness of the product for a specific purpose or application or its processability. INEOS Styrolution disclaims all liability in connection therewith. The customer himself is required to verify whether or not the product is suitable for the further processing or application intended and whether or not the product complies with the relevant statutory requirements. Unless explicitly and individually otherwise agreed in writing, INEOS Styrolution's sole and exclusive liability with respect to its products is set forth in INEOS Styrolution's General Terms and Conditions for Sale.
