

**DESCRIPTION**

Clearlux® 816 is a new developmental clear ABS polymer. The grade offers a unique combination of excellent flow, high impact strength and heat resistance.

**FEATURES**

- High flow
- Excellent transparency
- High impact strength
- Good chemical resistance

**APPLICATIONS**

- Toys, sports and leisure
- Pens and pencils
- Housings
- Cosmetic packaging

Property, Test Condition	Standard	Units	Values
<b>Rheological Properties</b>			
Melt Volume Rate, 220 °C/10 kg	ISO 1133	cm <sup>3</sup> /10 min	16
Melt Volume Rate, 220 °C/21.6 kg	ISO 1133	cm <sup>3</sup> /10 min	90
<b>Mechanical Properties</b>			
Charpy Notched Impact Strength, 23 °C	ISO 179-1eA	kJ/m <sup>2</sup>	8
Charpy Impact Strength, 23 °C	ISO 179 1eU	kJ/m <sup>2</sup>	NB
Tensile Stress at Yield, 50 mm/min, 23 °C	ISO 527-1/-2	MPa	42
Tensile Strain at Yield, 50 mm/min, 23 °C	ISO 527-1/-2	%	4
Tensile Modulus	ISO 527-1/-2	MPa	1900
Strain at Break, 23°C	ISO 527-1/-2	%	20
Hardness, Ball Indentation	ISO 2039-1	MPa	75
<b>Thermal Properties</b>			
Vicat Softening Temperature, VST/B/50 (50 N /50°C/h)	ISO 306	°C	87
Heat Deflection Temperature, A (1.8 MPa); annealed	ISO 75	°C	87
Heat Deflection Temperature, B (0.45 MPa); annealed	ISO 75	°C	93
Coefficient of Linear Thermal Expansion	ISO 11359	10 <sup>-6</sup> /°C	80-100
<b>Electrical Properties</b>			
Dissipation Factor (100 Hz)	IEC 60250	10 <sup>4</sup>	160
Volume Resistivity	IEC 60093	Ohm*m	10 <sup>14</sup>
Surface Resistivity	IEC 60093	Ohm	10 <sup>15</sup>
<b>Other Properties</b>			
Density	ISO 1183	kg/m <sup>3</sup>	1080
Water Absorption, saturated at 23°C	ISO 62	%	0,7

# Clearlux® 816

Methyl Methacrylate Acrylonitrile Butadiene Styrene (MABS)

## TECHNICAL DATASHEET

### 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 249	mm/s	200
Drying Temperature		°C	70
Drying Time		h	2

### Optical Properties

Refractive Index, Sodium D Line	ISO 489	-	1,54
Light Transmission, 2 mm	ASTM D 1003	%	90
Haze, 2 mm	ASTM D 1003	%	2

Typical values for uncolored products

### 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/cm<sup>3</sup>. 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.

### PRODUCT SAFETY

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

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