

Clearblend 145

Methyl Methacrylate Butadiene Styrene (MBS)

TECHNICAL DATASHEET

DESCRIPTION

Clearblend® 145 is an impact modified styrene acrylic copolymer blend with excellent clarity.

FEATURES

- Excellent clarity
- Low density
- Ease of processing
- Low moisture absorption

APPLICATIONS

- Appliances and consumer goods
- Toys
- Office accessories
- Industrial housings and covers
- Point of purchase displays

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm³/10 min	3.5
Mechanical Properties			
Tensile Stress at Yield, 23 °C	ISO 527	MPa	28
Tensile Modulus	ISO 527	MPa	2240
Elongation, Failure	-	%	40
Flexural Strength, 23 °C	ISO 178	MPa	55
Flexural Modulus, 23 °C	ISO 178	MPa	2280
Hardness, Rockwell	ISO 2039-2	R scale	80
Thermal Properties			
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°C	98
Optical Properties			
Refractive Index, Sodium D Line	ISO 489	-	1.57
Light Transmission at 550 nm	ASTM D 1003	%	90
Haze	ASTM D 1003	%	1.8
Other Properties			
Density	ISO 1183	kg/m³	1040

**INEOS
STYROLUTION****Clearblend 145**

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Property, Test Condition	Standard	Unit	Values
Water Absorption, Saturated at 23 °C	ISO 62	%	0.1
Processing			
Drying Temperature	-	°C	65
Drying Time	-	h	2
Max Service Temperature	-	°C	250

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

Clearblend resins are available in 25kg bags or octabin cartons.

PROCESSING

Clearblend is a low moisture absorption copolymer and in many instances processes readily without pre-drying. There are combinations of conditions that require the product to be dried, such as high humidity and heavy section molding. Two hours at 60 °C (140 °F) is adequate for most applications. Dehumidifying type driers are recommended. To obtain maximum clarity and gloss from this product, it is necessary to have a highly polished mold. Design of gates, runners and sprues can be patterned after standard practice for high-heat polystyrene. All mold surfaces must be temperature controlled at 54 °C (130 °F) for optimum clarity and surface gloss. For optimum clarity, machine cylinders, barrels, screws, valves, etc. should be thoroughly cleaned before processing. Contamination by other materials will cause streaking or haze.

PRODUCT SAFETY

During processing of Clearblend small quantities of styrene monomer may be released into the atmosphere. At styrene vapor concentrations below 20ppm no negative effects on health are expected. In our experience, the concentration of styrene does not exceed 1 ppm in well ventilated workplaces - that is where five to eight air changes per hour are made.

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.