

DESCRIPTION

Styrolution PS ESCRimo is a high impact polystyrene grade with an improved stress cracking resistance compared to conventional high impact polystyrene.

FEATURES

- High ESCR resistance
- Deep draw thermoforming
- UL 94 HB

APPLICATIONS

- Refrigerator inner liner
- Refrigerator door liner

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm ³ /10 min	3.4
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179	kJ/m ²	15
Tensile Stress at Yield, 23° C	ISO 527	MPa	22
Tensile Strain at Yield, 23° C	ISO 527	%	1.8
Tensile Modulus	ISO 527	MPa	1550
Elongation at Break (MD)	ISO 527	%	50
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50°C/h)	ISO 306	°C	89
Electrical Properties			
Dielectric Constant (100 Hz)	IEC 60250	-	2.5
Volume Resistivity	IEC 60093	Ohm*m	>1E16
Surface Resistivity	IEC 60093	Ohm	>1E13
Other Properties			
Density	ISO 1183	kg/m ³	1040
Water Absorption, Saturated at 23°C	ISO 62	%	<0.1
Moisture Absorption, Equilibrium 23°C/50% RH	ISO 62	%	< 0.1

Styrolution PS ESCRimo

High Impact Polystyrene (HIPS)

TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Processing			
Melt Temperature Range	ISO 294	°C	180 - 260

Typical values for uncolored products

SUPPLY FORM

Styrolution PS ESCRimo is supplied as cylindrical shaped granules. It has to be kept in its original containers in a cool, dry place. Avoid direct exposure to sunlight. Styrolution PS can be stored in silos.

PROCESSING

Although Styrolution PS ESCRimo can be processed by any method applicable to polystyrene-based plastics, it is most suitable for extrusion / thermoforming. Mass temperatures can be as high as 260°C.

PRODUCT SAFETY

During processing of Styrolution PS 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.

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