INEOS STYROLUTION

Styrolution PS 485N

High Impact Polystyrene (HIPS)

TECHNICAL DATASHEET

DESCRIPTION

Styrolution PS 485N is a high impact grade of polystyrene for extruded sheets with a matte surface.

FEATURES

- Matte surface
- UL 94 HB

APPLICATIONS

- Extruded parts with matte finish
- Fat resistant packaging

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm^3/10 min	4
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m^2	10
Tensile Stress at Yield, 23 °C	ISO 527	MPa	23
Tensile Strain at Yield, 23 °C	ISO 527	%	1.6
Tensile Modulus	ISO 527	MPa	1650
Elongation at Break (MD)	ISO 527	%	35
Flexural Strength, 23 °C	ISO 178	MPa	32
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	90
Coefficient of Linear Thermal Expansion	ISO 11359	10^{-6}/°C	80
Thermal Conductivity	DIN 52612-1	W/(m K)	0.17
Electrical Properties			
Dielectric Constant (100 Hz)	IEC 62631-2-1	-	2.5
Dissipation Factor (100 Hz)	IEC 62631-2-1	10^{-4}	4
Dissipation Factor (1 MHz)	IEC 62631-2-1	10^{-4}	4
Volume Resistivity	IEC 62631-3-1	Ohm*m	$>10^{16}$
Surface Resistivity	IEC 62631-3-1	Ohm	$>10^{13}$

Contact us:
Phone +49 (2133) 9309 – 168
INSTY.emea@ineos.com
www.ineos-styrolution.com

Revision Date: 2016.01.17

Property, Test Condition	Standard	Unit	Values
Other Properties			
Density	ISO 1183	kg/m³	1040
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.7
Melt Temperature Range	ISO 294	°C	180 - 260
Mold Temperature Range	ISO 294	°C	45
Injection Velocity	ISO 294	mm/s	200

Typical values for uncolored products

SUPPLY FORM

Styrolution PS 485N 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 485N can be stored in silos.

PROCESSING

Styrolution PS 485N can be processed by all conventional techniques using standard conditions for impact polystyrene. Mass temperature during extrusion should be below 240°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 were five to eight air changes per hour are made.

DISCLAIMER

The aforementioned data shall constitute the agreed contractual quality of the product sold by INEOS Styrolution at the time of passing of risk. INEOS Styrolution does not make any further warranty, representation or guarantee of any kind, express or implied, regarding the suitability of the product for any particular purpose or application and 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.

Contact us:
Phone +49 (2133) 9309 – 168
INSTY.emea@ineos.com
www.ineos-styrolution.com