

TASNEE HD F0455

POLYETHYLENE

DESCRIPTION

TASNEE HD F0455 is a High Density Polyethylene resin which possesses an outstanding combination of stiffness and impact performance. This grade can be processed on blown film lines at high output rates with excellent bubble stability, very low gel levels and homogeneous appearance.

TYPICAL APPLICATIONS:

Main applications are household bags, standard carrier bags, T-shirt bags, bin liner, co-extruded blown films, automatic packaging film, lamination and release film, perforated boiling bags, artificial paper, labels and heavy duty packaging.

PRODUCT CHARACTERISTICS

Features: Good Drawdown, Low Gel, High Rigidity, Good Toughness.

Typical Properties

Physical	Method	Unit	Value
Density	ISO 1183	g/cm ³	0.957
Melt Flow Rate (190°C /5kg)	ISO 1133	g/10 min	0.40
Melt Flow Rate (190°C /21.6kg)	ISO 1133	g/10 min	12.0
Mechanical	Method	Unit	Value ⁽¹⁾
Dart Drop Impact	ASTM D 1709	g	270
Tensile Strength	ISO 527-1, -3		
Note : MD		MPa	37.0
Note : TD		MPa	35.0
Tensile Strain at Break	ISO 527-1, -3		
Note : MD		%	400
Note : TD		%	480
Elmendorf Tear Strength	ISO 6383-2		
Note : MD		mN	300
Note : TD		mN	420

⁽¹⁾ (Film properties tested using 20 μm thickness blown film extruded at a melt temperature of 210°C, long stalk process and a blow-up ratio of 4:1)

Recommended Temperature:

Melt temperature: 200-230°C, thickness: 10 to 200 μm

Note:

The above properties are not to be construed as specification.

Safety

The material is manufactured to the highest standards but, special requirements apply to certain applications such as food end-use contact and direct medical use. For specific information on regulatory compliance contact your local representative. Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses are suggested as minimal precaution to prevent mechanical or thermal injury to the eyes. Molten polymer may be degraded if it is exposed to air during any of the processing and off-line operations. The product of degradation have an unpleasant odour. In higher concentrations they may cause irritation of the mucus membranes. Fabrication areas should be ventilated to carry away fumes or vapors. Legislation on the control of emission and pollution prevention must be observed. If the principles of sound manufacturing practice are adhered to and the place of work is well ventilated, no health hazards are involved in processing the material. The material will burn when supplied with excess heat and oxygen. It should be handled and stored away from contact with direct flames and/or ignition sources. In burning the material generates considerable heat and may release a dense black smoke. Minor fires can be extinguished by water, developed fires should be extinguished by heavy foams forming an aqueous or polymeric film. For further information about safety in handling and processing please refer to the Material Safety Data Sheet (MSDS).

Storage

The material is packed in 25 kg bags or in bulk containers protecting it from contamination. Storage times of natural materials longer than 6 months may have a negative influence on the quality of the final product. It is generally recommended to convert all materials latest within 6 months of production. The material is subjected to degradation by ultra-violet radiation or by high storage temperatures. Therefore the material must be protected from direct sunlight, temperatures above 40°C and high atmospheric humidity during storage. Further unfavorable storage conditions are large fluctuations in ambient temperature and high atmospheric humidity. These conditions may lead to moisture condensing inside the packaging. Under these circumstances, it is recommended to dry the material before use. Unfavorable storage conditions may also intensify the material's slight characteristic odour.

Disclaimer

“The information in this publication is submitted without prejudice, and is based on our current knowledge and experience and on a limited number of tests”.

“In view of the many factors that may affect processing and application, these data do not relieve the receiver of this information from the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose of the products made with or on the basis of the information in this publication”.