

TASNEE LD 4025AS

POLYETHYLENE

DESCRIPTION

TASNEE LD 4025AS is a Low Density Polyethylene with a Melt Flow Rate of 4.0 g/10min (190°C/2.16 kg). **TASNEE LD 4025AS** is mainly recommended for thin-gauge with high clarity film applications. It contains both slip agent and anti blocking additives and has a suitable molecular structure to produce film with excellent mechanical properties.

TASNEE LD 4025AS can be easily processed on all types of extruders designed for polyethylene. The melt temperature is suggested to be in the range of 150 – 190°C. Excellent properties of the film are achieved with a blow - up ratio of 2.5:1 and recommended film thickness range from 15 to 40 µm.

PRODUCT CHARACTERISTICS

Typical Applications: Shrink Film, **Food Packaging Film**

Features: Anti-Blocking and Slip Additives, Good Optical Properties, Good Processability, Low Friction, Good Stiffness

Typical Properties

Physical	Method	Unit	Value
Density	ISO 1183	g/ cm ³	0.925
Melt Flow Rate (190°C/2.16 kg)	ISO 1133	g/10min	4.0
Melting Temperature	ISO 3146	°C	111
Vicat Softening Temperature (A50(50 °C /h 10 N))	ISO 306	°C	92

Physical	Method	Unit	Value ⁽¹⁾
Tensile Modulus	ISO 527-1,-2	MPa	260
Tensile Stress @ Yield	ISO 527-1,-2	MPa	11
Tensile Strain @ Break MD / TD	ISO 527-1,-3	%	300 / 600
Tensile Strength MD / TD	ISO 527-1,-3	MPa	22 / 15
Dart Drop Impact (50 µm)	ASTM D 1709	gm	100
Coefficient of Friction	ISO 8295	%	<20
Haze (50 µ)	ASTM D 1003	%	<9.0
Gloss (20°)	ASTM D 2457	GU	>60
(60°)		GU	>105
Clarity	-	%	-
Ball Indentation Hardness (H 49 / 30)	ISO 2039-1	MPa	18
Shore Hardness (Shore D)	ISO 868	-	48

⁽¹⁾ (The above properties are measured on blown film of 50µm, extruded at a melt temperature of 170°C and a blow up ratio of 2.5:1)

Note:

The typical properties; are not to be construed as specifications.

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”.