

## LOW DENSITY POLYETHYLENE

# TASNEE LD 4025AS

### DESCRIPTION

TASNEE LD 4025AS is a Low Density Polyethylene with a Melt Flow Rate of 4.0 g/10min (190°C/2.16kg), recommended for mono and multilayer thin gauge blown film extrusion. TASNEE LD 4025AS contains slip and anti- blocking additives and has a suitable molecular structure to produce film with excellent mechanical and optical 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.

### TYPICAL APPLICATIONS

Shrink Film, Food Packaging Film, Blown Film and Cast Film.

### TYPICAL PROPERTIES

Physical	Method	Unit	Value
Density	ISO 1183	g/cm <sup>3</sup>	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 10N))	ISO 306	°C	92
Mechanical	Method	Unit	Value <sup>+1</sup>
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	g	100
Coefficient of Friction	ISO 8295	%	< 20
Optical	Method	Unit	Value <sup>+1</sup>
Haze	ASTM D 1003	%	< 9
Gloss (20°)	ASTM D 2457	GU	> 60
Gloss (60°)	ASTM D 2457	GU	> 105

<sup>+1</sup> The above properties are measured on blown film of 50 µm thickness, extruded at melt temperature of 180°C and a blow up ratio of 2:1

**NOTE** The typical properties are not to be construed as specifications.

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### FOOD CONTACT

The material is manufactured to the highest standards but, special requirements apply to certain applications, such as food contact end-use. For specific information on regulatory compliance, please contact TASNEE below or our local representative in your area.

### SAFETY

Workers should be protected from the possibility of skin or eye contact with molten polymer. As minimum precaution, safety glasses and heat resistance gloves are suggested to prevent mechanical or thermal injury to eyes and hands. Molten polymer exceeding processing condition requirements may degrade and release, fumes, vapors and unpleasant odor. In higher concentrations they may cause irritation of the mucus membranes. Fabrication areas should be ventilated to carry away fumes and vapors. Legislation on the control of emissions 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 may 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. Fires should be extinguished by heavy foams or dry powder. 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 time of material 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 from delivery date. 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. TASNEE will not give any warranty to unfavorable storage conditions which may lead to quality deterioration such as color change, bad smell and inferior product performance.

### DISCLAIMER

"The information and data contained in this publication is submitted without prejudice, and is based on our current knowledge, 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 nor of suitability for a specific purpose of the products made with or on the basis of the information in this publication".

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