

# TASNEE LD 0725N

# **POLYETHYLENE**

#### DESCRIPTION

TASNEE LD 0725N is a Low Density Polyethylene with a Melt Flow Rate of 0.75 g/10min (190°C/2.16kg).

**TASNEE LD 0725N** is an additive free grade and has a suitable molecular structure to make film with excellent mechanical properties.

*TASNEE LD 0725N* can be easily processed on all types of extruders designed for polyethylene. The melt temperature is suggested to be in the range of  $170 - 220^{\circ}$ C. Excellent properties of the film are achieved with a blow-up ratio of 2:1 and recommended film thickness range from 25 to 100  $\mu$ m.

#### TYPICAL APPLICATIONS:

Medium Duty Shrink-wrap, Medium Duty Bags & Pouches, Food Packaging Films.

#### PRODUCT CHARATERISTICS

Good Film Strength, Good Optical Properties, Good Processability.

#### **TYPICAL PROPERTIES**

| Physical                                       | Method   | Unit              | Values |
|--|----------|-------------------|--------|
| Density  | ISO 1183 | g/cm <sup>3</sup> | 0.923  |
| Melt Flow Rate (190°C/2.16 kg)                 | ISO 1133 | g/10min           | 0.75   |
| Melting Temperature                            | ISO 3146 | °C                | 111    |
| Vicat Softening Temperature (A50 (50°C/h 10N)) | ISO 306  | °C                | 96     |

| Mechanical                       | Method       | Unit | Values <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  | 26 / 24               |
| Dart Drop Impact (50 μm)         | ASTM D 1709  | g    | 150                   |
| Coefficient of Friction          | ISO 8295     | %    | > 80                  |

| Optical        | Method      | Unit | Values <sup>(1)</sup> |
|----------------|-------------|------|-----------------------|
| Haze           | ASTM D 1003 | %    | < 8                   |
| Gloss (20°)    | ASTM D 2457 | GU   | > 40                  |
| $(60^{\circ})$ | ASTM D 2437 | GU   | > 90                  |

 $<sup>^{(1)}</sup>$  The above properties are measured on blown film of 50  $\mu m$  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.



### **Safety**

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 contact your local representative Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses are suggested as minimum 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 products of degradation have an unpleasant odor. 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 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 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 odor.

## Disclaimer

"The information 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 or 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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