

TASNEE PP H1045

POLYPROPYLENE

DESCRIPTION

TASNEE PP H1045 is a Polypropylene Homopolymer with a Melt Flow Rate (MFR) of 4.5 g/10min.

TASNEE PP H1045 is designed for high extrusion speed lines to make stretch tapes, offering low water-carry-over and low shrinkage. Good balance of strength, shrinkage, splitting tendency. It is compliant to food contact regulations.

TYPICAL APPLICATIONS

Weaving tapes for carpet backing, geo-textiles, woven bags and industrial and sport fabrics.

| TYPICAL PROPERTIES | METHOD | UNIT | VALUE |
|---|---------------|-------------------|-------|
| Physical | | | |
| Melt Flow Rate (230°C/2.16 kg) | ISO 1133-1 | g/10 min | 4.5 |
| Density | ISO 1183-1 | g/cm ³ | 0.9 |
| Mechanical | | | |
| Tensile Strength @ Yield | ISO 527-1, -2 | MPa | 34 |
| Tensile Elongation @ Yield | ISO 527-1, -2 | % | 9 |
| Flexural Modulus | ISO 178 | MPa | 1450 |
| Impact | | | |
| Charpy Impact Strength -Notched @ 23 °C | ISO 179/1eA | kJ/m ² | 3.5 |
| Hardness | | | |
| Rockwell Hardness | ISO 2039-2 | R | 100 |
| Thermal | | | |
| Melting Temperature | ISO 11357-3 | °C | 163 |
| Vicat Softening Temperature @ A50 | ISO 306 | °C | 152 |
| Heat Distortion Temperature @ 0.45 MPa | ISO 75-1, -2 | °C | 85 |

Typical Processing Conditions

| | |
|--------------------------|----------------|
| Extrusion Temperatures | : 200 ~ 260 °C |
| Water Bath Temperature | : 15 ~ 40 °C |
| Orientation Temperatures | |
| Hot plate | : 100 ~ 140 °C |
| Hot rolls | : 100 ~ 140 °C |
| Oven air | : 140 ~ 180 °C |
| Draw Ratio | : 1:6 to 1:8 |
| Annealing Temperature | : 150 ~ 170 °C |

Note: Processing parameters should only be used as guidelines. The above properties values are not to be construed as specifications.

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 Safety Data Sheet (SDS).

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. **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 document 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 document".