

## TECHNICAL DATA SHEET

## 73005TU

**73005TU** is a LLDPE Roto Molding Grade produced by the Spherilene Technology with controlled morphology, excellent balance of processability, mechanical properties & UV stability.

This grade is stabilized adequately with Light Stabilizer <sup>+</sup> to give a long service life under outdoor exposure.

**73005TU** is ideally suited for Tanks & Containers with good UV stability for domestic & industrial water storage, sanitation & agriculture.

**BIS Designation Code:** IS 7328-2B-RDO-CDC

| Property                                      | Test Method                             | Unit              | Value         |
|-----------------------------------------------|-----------------------------------------|-------------------|---------------|
| Melt Flow Index (2.16 kg, 190°C)              | ASTM D1238,<br>IS 13360 (Part 4/Sec 1)  | g/10 min          | 5.0           |
| Melt Flow Index (5 kg, 190°C)                 |                                         |                   | 14            |
| Melt Flow Index (21.6 kg, 190°C)              | ASTM D1238                              | g/10 min          | 120           |
| Density (23°C)                                | ASTM D1505,<br>IS 13360 (Part 3/Sec 11) | g/cm <sup>3</sup> | 0.934         |
| Density (23°C)                                | IS 2530                                 | g/cm <sup>3</sup> | 0.932 – 0.936 |
| <b>Physical Property</b>                      |                                         |                   |               |
| Tensile Strength at Yield                     | ASTM D638<br>(50 mm/min)                | MPa               | 17            |
| Elongation at Break                           |                                         | %                 | 800           |
| Notched Izod Impact Strength (23°C)           | ASTM D256A                              | J/m               | 350           |
| Flexural Modulus                              | ASTM D790A                              | MPa               | 400           |
| Vicat Softening Point (10 N)                  | ASTM D1525                              | °C                | 110           |
| DSC Melting Temperature                       | ASTM D3418                              | °C                | 126           |
| ESCR (F <sub>50</sub> , 10% Igepal soln. v/v) | ASTM D1693B                             | Hr                | 100           |
| <b>Suggested Processing Conditions</b>        |                                         |                   |               |
| Oven Temperature                              | 240 – 280 °C                            |                   |               |

\* Halene L is the registered trademark of Linear Low-Density Polyethylene of Haldia Petrochemicals Limited

Mechanical Properties are on Injection Molded test specimens.

<sup>+</sup> The total Light Stabilizer content is ~2000 ppm.

This grade meets the requirements of:

IS 7328:2020 Specification for Polyethylene Material for Moulding and Extrusion

IS 16738:2018 Positive List of Constituents for Polypropylene, Polyethylene and their Copolymers for its Safe Use in Contact with Foodstuffs and Pharmaceuticals

IS 10146 for use in contact with foodstuffs, pharmaceuticals, and drinking water.

*This product is not recommended for manufacturing of Single Use Plastic (SUP) items listed under Plastics Waste Management (PWM) Rule 2016 and its latest amendment*

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