

SKYi Stabil-OL1135

Technical Data Sheet: PP 30 LFT

Description:

SKYi Stabil-OL1135 is a special light and heat stabilized long glass fibre reinforced polypropylene grade, for injection moulding and extrusion. The long glass fibres, chemically coupled to the polypropylene matrix, providing outstanding mechanical properties.

SKYi Stabil-OL1135 is available both in black and natural.

Applications:

SKYi Stabil-OL1135 is intended for injection moulding of highly demanding technical applications.

The excellent properties of **SKYi Stabil-OL1135** make it suitable for: Electrical components, automotive parts, interior, exterior and under the bonnet, structural furniture parts, load bearing, demanding components for various engineering sectors.

SKYi Stabil-OL1135 can, in many of these applications, substitute other engineering plastics or metal alloys.

Product Characteristics

SR. NO.	PROPERTIES	TEST METHOD	UNITS	VALUES		
Α	PHYSICAL					
1	Specific gravity		g/cc	1.09		
В	MECHANICAL					
1	Tensile strength at break	ISO 527-I	MPa	114		
2	Tensile Modulus	ISO 527-I	MPa	7200		
3	Elongation at Break	ISO 527-I	%	2.1		
4	Flexural Strength	ISO 178	MPa	160		
5	Flexural Modulus	ISO 178	MPa	6400		
6	Charpy Impact Test- Notched	ISO 179-I	kJ/m²	20		
С	THERMAL					
1	HDT (At 0.45MPa)	ISO 75-I	°C	160		

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Storage and Handling:

SKYi Stabil-OL1135 should be stored in dry conditions at temperatures below 50°C. Improper storage can initiate degradation with resulting odour generation and colour changes.

Processing Guidelines: TEMPERATURES- Barrel Zones

Material	Feed section (°C)	Nozzle(°C)	Melt temperature (°C)	Mold temperature (°C)
LFT GF-PP	220-230	230-250	230-250	80

Dimensional tolerances of PP-LFT:

Dimensional tolerance guidelines:

Based on the studies on PP and Glass reinforced PP (ref-1), the dimensional tolerances of parts molded in PP-with GF or Long Glass fibers depends on thickness and length/depth. 25mm long part with approx. 3 mm thick part can be molded with dimensional tolerance of +/- 0.1mm (100 microns) and further fine tolerance upto +/-0.07 mm can be achieved but usually results in longer molding cycles and hence cost.

Reference 1: Reference: By Design: Polypropylene part design, Part 1 by: <u>Glenn Beall Materials Extrusion: Film</u> & Sheet, <u>Injection Molding</u>, <u>Thermoforming</u> May 26, 2002

Safety:

SKYi Stabil-OL1135 is not classified as a dangerous preparation. Dust and fines from the product may give a risk for dust explosion. All equipment should be properly earthed. Inhalation of dust may irritate the respiratory system and should be avoided. During processing of the product small amounts of fumes are generated, which require proper ventilation.

Recycling:

The product is suitable for recycling using modern methods of shredding and cleaning. Inhouse production waste should be kept clean to facilitate direct recycling. The Materials Safety Data Sheet is available on request. Please contact your SKYi representative for more details on various aspects of safety, recovery and disposal of the product.

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