

Product Data Sheet

Lucofin® 1451, 1452, 1459, 1460, 1461

1. Product description

Lucofin® is a thermally and against UV-radiation stabilized TPO¹ based material and is used as sealing membranes for swimming pools and ponds..

The granules are available in the standard colors

Lucofin®1451, pastel blue	acc. RAL 5024
Lucofin®1452, light blue	acc. RAL 5012
Lucofin®1459, azur blue	acc. RAL 5012
Lucofin®1460, signal white	acc. RAL 9003
Lucofin®1461, ice blue	

Other colors are available on request.

2. Product properties

Lucofin® displays excellent tear resistance, flexibility, and heat resistance. It exhibits good toughness and sufficient biaxial stretchability, and flexibility even at low temperatures. Special stabilization provides good resistance to heat and UV degradation. Thus, Lucofin® is highly resistant to weathering and ageing.

3. Product advantages

- Easy processing when used on standard processing equipment
- Easy to weld (hot air / hot air wedge welding)
- Good mechanical properties
- Thermal ageing resistance
- Compatible with polyolefines and bitumen acc. to DIN 16726

4. Applications

Colored Lucofin® products are mainly used in construction for ponds, swimming pool membranes and, profiles for the construction industry as well as water barrier. Lucofin® membranes and profiles can be welded safely and durably.

5. Processing

Lucofin® products are suited for standard processing equipment used for thermoplastics. We recommend the following processing temperatures as standard values for extrusion.

Membranes/ flat-sheet composites approx. 160° - 230°C
 Coatings: approx. 160° - 240°C

For injection molding, Lucofin® compounds are processed at melt temperatures ranging from 160° - 220°C and mold temperatures from 10° - 40°C.

6. Chemical resistance

Lucofin® is resistant to water and aqueous solutions, to salt as well as to dilute acids and bases.

It is also resistant against common used disinfection media for pool water regeneration based on chlorine or silver. When exposed to aliphatic, aromatic and halogen-substituted hydrocarbons, Lucofin® may swell or dissolve to a certain extent.

7. UV resistance

The UV test acc. EN 1297 passed 5.000 h exposure test for all Lucofin® swimming pool grades

8. Storage and handling

Granules in 25 kg bags, pallet standard = 1.375 kg or 1000 kg Big Bags.

Lucofin®1451-1461 should be stored under dry conditions at a temperature below 40°C and protected from UV-light.

Otherwise the packaging could be damaged or degradation may occur resulting in odor generation and color changes

We strongly recommend to use the material latest within 6 months after delivery. Storage time in excess of 6 months may have a negative impact on the processability and should be inspected according to quality assurance measures to ensure product's performance.

¹ TPO/FPO – Thermoplastic Polyolefines / Flexible Polyolefines

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Typical Properties							
	Standard	Unit	1451	1452	1459	1460	1461
Color			pastel blue	blue	azur blue	signal white	ice blue
MFR (190 °C/2.16 kg)	ISO 1133	g/10 min	8	8	8	8	8
Density (23 °C)	ISO 1183	g/cm ³	1,0	1,0	1,0	1,0	1,0
Shore Hardness A (23 °C)	ISO 868	-	95	90	95	95	95
Low Temperature Flexural Test	DIN 53361	°C	< - 45	< - 45	< - 45	< - 45	< - 45
These standard values are typical values and should not be regarded as specifications.							

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