

Technical Data Sheet

Icorene 1869

Linear Low Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® 1869 is a self adhesive linear low density polyethylene powder specifically developed for rotational lining.

This grade has been designed using a high performance additive package formulated to provide good bonding to metal surfaces during processing. ICORENE® 1869 is particularly suitable for bonding to steel surfaces.

We recommend the use of a specific metal preparation process to ensure consistent and effective metal-to-polymer bonding.

For processing advice please consult our process guide.

General

| | | |
|-------------------|----------------------|-----------------------|
| Additive | • Antioxidant | |
| Features | • Bondability | • Corrosion Resistant |
| Uses | • Adhesives | |
| Appearance | • Black | • Natural Color |
| Forms | • Powder | |
| Processing Method | • Rotational Molding | • Roto Lining |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|-------------------------|--------------------|-------------|
| Density (73°F (23°C)) | 0.927 g/cm³ | 0.927 g/cm³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 Kg) | 3.5 g/10 min | 3.5 g/10 min | ISO 1133 |
| Environmental Stress-Cracking Resistance (ESCR) 122°F (50°C), 10% Antarox, Rotational Molded, F50 | > 1000 hr | > 1000 hr | ASTM D1693B |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Stress | | | ISO 527-2 |
| Yield, 0.118 In (3.00 Mm), Rotational Molded | 2180 psi | 15.0 MPa | |
| Flexural Modulus | | | ISO 178 |
| 73°F (23°C), 0.118 In (3.00 Mm) | 67400 psi | 465 MPa | |
| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Shore Hardness (Shore D) | 52 | 52 | ISO 868 |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Melting Temperature | 250 °F | 121 °C | DSC |

Notes

These are typical property values not to be construed as specification limits.