Technical Data Sheet

Icorene 4220 700 M3 POWDER BLACK

High Density Polyethylene

Product Description

Icorene 4220 is a high density polyethylene for rotational molding applications. The grade is UV stabilized and suitable for applications requiring good stiffness and processability.

Regulatory Status

For regulatory compliance information, see *Icorene* 4220 700 M3 POWDER BLACK Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial: Active
Availability	North America
Processing Method	Rotomolding
Attribute	Good Toughness; UV Resistant
Forms	Powder
Appearance	Natural Color
Additive	UV Stabilizer
Application	General Purpose; Outdoor Applications

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	1.5 to 2.5	g/10 min	ASTM D1238
Density	0.940 to 0.944	g/cm³	ASTM D1505
Mechanical			
Tensile Strength at Yield, (50 mm/min)	22.8	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, 1% Secant)	1000	MPa	ASTM D790
Environmental Stress Crack Resistance			
(Condition A, F50, 100% Igepal)	400	hr	ASTM D1693
(F50, 10% Igepal)	50.0	hr	ASTM D1693
Impact			
Impact Strength			
(-40 °C, 3.18 mm, Rotational Molded)	79	J	ARM
(-40 °C, 6.35 mm, Rotational Molded)	>258	J	ARM
Thermal			
Deflection Temperature Under Load Unannealed (264 psi), (0.125 mm, Rotational Molded)	42.2	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	63.3	°C	ASTM D648

Manufacturer website: https://www.lyondellbasell.com/en/

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

© LyondellBasell Industries Holdings, B.V. 2026

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.