



Maxxam™ FR PE 152

Polyethylene

Key Characteristics

Product Description

Maxxam™ FR flame-retardant polyolefin compounds and masterbatches meet stringent flammability performance requirements defined by industry agencies, including Underwriters Laboratories UL 94 V-2, V-0, and 5VA performance ratings. In addition, many compounds in the Maxxam FR portfolio offer elevated Relative Thermal Index (RTI) ratings.

General

Material Status	• Commercial: Active	
Regional Availability	• Africa & Middle East	• Europe
	• Asia Pacific	• South America
Features	• Flame Retardant	
Forms	• Pellets	
Processing Method	• Rotational Molding	

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.00	0.998 g/cm ³	ASTM D792
Specific Volume	27.7 in ³ /lb	1.00 cm ³ /g	ASTM D792
Melt Mass-Flow Rate (MFR) ² (190°C/2.16 kg)	2.7 g/10 min	2.7 g/10 min	ASTM D1238
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ³	160000 psi	1100 MPa	ASTM D638
Tensile Strength ³ (Yield)	2300 psi	15.9 MPa	ASTM D638
Tensile Elongation ³ (Break)	500 %	500 %	ASTM D638
Flexural Modulus	74000 psi	510 MPa	ASTM D790
Flexural Strength	2500 psi	17.2 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.3 ft·lb/in	69 J/m	
Gardner Impact			ASTM D3029
73°F (23°C), 0.125 in (3.18 mm)	140 in·lb	15.8 J	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, 0.125 in (3.18 mm)	129 °F	54.0 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	115 °F	46.0 °C	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.236 in (6.00 mm), NC	V-0	V-0	
0.0591 in (1.50 mm), ALL	V-2	V-2	
Oxygen Index (0.125 in (3.18 mm))	26 %	26 %	ASTM D2863

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Notes

¹ Typical values are not to be construed as specifications.

² Procedure A

³ Type I, 2.0 in/min (51 mm/min)

CONTACT INFORMATION**Americas**

Mexico - Toluca
+52 722 2790200

United States - Avon Lake
+1 440 930 1000

Asia

China - Shanghai
+86 21 5080 1188

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Tianjin
+86 22 2532 8818

India - Navi Mumbai
+91 22 27784426/22781218

Japan - Tokyo
+81 369 129 102

Singapore - Singapore
+65 6861 9325

Taiwan - Yonghe City,
+886 9396 99740

Europe

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314

Turkey - Basaksehir-Istanbul-Türkiye
+90 212 549 2256



Beyond Polymers.

Better Business Solutions.™

www.polyone.com

PolyOne Americas

33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188

PolyOne Europe

6 Giallewee
Please Call Assesse
Belgium Phone Number +32
83 660 211

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