

# Maxxam<sup>™</sup> FR QD 813.Y001-1000 RoHS Polypropylene

# **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 <sup>1</sup>	
Regional Availability	<ul> <li>Africa &amp; Middle East</li> <li>Asia Pacific</li> <li>Europe</li> <li>Latin America</li> <li>North America</li> </ul>	
Filler / Reinforcement	Filler, 30% Filler by Weight    Glass Fiber	
Features	Flame Retardant     High Impact Resistance	
Forms	Pellets	

## Technical Properties<sup>2</sup>

	recinical rioperti	163	
Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.46	1.46	ASTM D792
Specific Volume	19.8 in³/lb	0.715 cm³/g	ASTM D792
Melt Mass-Flow Rate (MFR) <sup>3</sup> (230°C/2.16 kg)	4.0 g/10 min	4.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.0E-3 to 3.0E-3 in/in	0.10 to 0.30 %	ASTM D955
Outdoor Suitability (All Colors)	f1	f1	UL 746C
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>4</sup> (Yield)	6500 psi	44.8 MPa	ASTM D638
Tensile Elongation <sup>5</sup> (Break)	7.0 %	7.0 %	ASTM D638
Flexural Modulus	680000 psi	4690 MPa	ASTM D790
Flexural Strength	10000 psi	68.9 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	3.5 ft·lb/in	190 J/m	
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)	302 °F	150 °C	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.06 in (1.5 mm), All Colors	V-0	V-0	
0.08 in (2.0 mm), All Colors	<ul><li>V-0</li><li>5VA</li></ul>	<ul><li>V-0</li><li>5VA</li></ul>	
0.12 in (3.0 mm), All Colors	<ul><li>V-0</li><li>5VA</li></ul>	<ul><li>V-0</li><li>5VA</li></ul>	

Copyright ©, 2016 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. Poll-YONE MAKES NO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Rev: 2015-12-03 Page: 1 of 2

#### Notes

- <sup>1</sup> EM1002639160 QD-813.Y001-1000 RoHS replaced this grade.
- <sup>2</sup> Typical values are not to be construed as specifications.
- <sup>3</sup> Procedure A
- <sup>4</sup> Type I, 0.20 in/min (5.1 mm/min)
- <sup>5</sup> Type I, 2.0 in/min (51 mm/min)

#### **CONTACT INFORMATION**

#### Americas

United States - Avon Lake +1 440 930 1000

United States - McHenry +1 815 385 8500

#### Asia

China - Guangzhou +86 20 8732 7260

China - Shenzhen +86 755 2969 2888

China - Suzhou +86 512 6823 24 38 China - Suzhou +86 512 6265 2600

Hong Kong -+852 2690 5332

Taiwan - Yonghe City, +886 9396 99740, +886 2929 1849

#### Furono

Germany - Gaggenau +49 7225 6802 0

Spain - Barbastro (Huesca) +34 974 310 314



Beyond Polymers.

Better Business Solutions. SM

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 Giällewee +352 269 050 35

Copyright ©, 2016 PolyOne Corporation. PolyOne makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. PolyOne makes no warranties or guarantees respecting suitability of either PolyOne's products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. Poll-YONE MAKES NO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Rev: 2015-12-03 Page: 2 of 2