



# Maxxam™ FR WC-P85 NHFR RoHS Natural Polyolefin

## Key Characteristics

### Product Description

Maxxam™ HFFR WC-P85 RoHS Natural is a halogen-free flame retardant polyolefin compound characterized by low smoke, low flame spread, excellent spring-back, no plate-out and high extrusion line speed. It is designed for very thin-wall (0.5 mm or 20 mills), flexible, primary conduit applications for optical fiber cables among others. It is also excellent for injection molding.

### General

|                       |   |
|-----------------------|---|
| Material Status       | • Commercial: Active  |
| Regional Availability | • North America   |
| Features              | • Flame Retardant • Good Processability<br>• Good Chemical Resistance • Halogen Free • Low Toxicity<br>• Good Colorability • Low Smoke Emission |
| Uses                  | • Conduit • Corrugated Pipe • Wire & Cable Applications   |
| RoHS Compliance       | • RoHS Compliant  |
| Forms                 | • Pellets   |
| Processing Method     | • Extrusion • Injection Molding   |

## Technical Properties <sup>1</sup>

| Physical                                  | Typical Value (English) | Typical Value (SI) | Test Method |
|---|-------------------------|--------------------|-------------|
| Specific Gravity                          | 1.12                    | 1.12               | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 7.5 g/10 min            | 7.5 g/10 min       | ASTM D1238  |
| Mechanical                                | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Strength <sup>2</sup> (Break)     | 1300 psi                | 8.96 MPa           | ASTM D638   |
| Tensile Elongation <sup>2</sup> (Break)   | 450 %                   | 450 %              | ASTM D638   |
| Flexural Modulus <sup>3</sup>             | 43000 psi               | 296 MPa            | ASTM D790   |
| Hardness                                  | Typical Value (English) | Typical Value (SI) | Test Method |
| Durometer Hardness                        |                         |                    | ASTM D2240  |
| Shore D                                   | 48                      | 48                 |             |
| Shore D, 10 sec                           | 43                      | 43                 |             |
| Flammability                              | Typical Value (English) | Typical Value (SI) | Test Method |
| Flame Rating                              |                         |                    | UL 94       |
| 0.0610 in (1.55 mm), molded specimen      | V-0                     | V-0                |             |
| Oxygen Index                              | > 33 %                  | > 33 %             | ASTM D2863  |

### Notes

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> 2.0 in/min (51 mm/min)

<sup>3</sup> 0.50 in/min (13 mm/min)

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