

**MIPELON™ XM-221U**

Mitsui Chemicals America, Inc. - *Ultra High Molecular Weight Polyethylene*
**General Information**
**Product Description**

MIPELON™ Fine Particle Ultra High Molecular Weight Polyethylene Powder (UHMWPE Powder)

**General**

Material Status	• Commercial: Active		
Availability	• North America		
Features	• Abrasion Resistant	• Good Impact Resistance	• Self Lubricating
	• Chemical Resistant	• High Heat Resistance	
	• Dispersible	• Low Friction	
Uses	• Blending	• Compounding	• Filtration Media
Forms	• Powder		
Processing Method	• Compounding		

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density	0.940	g/cm <sup>3</sup>	ASTM D1505
Apparent (Bulk) Density	0.40	g/cm <sup>3</sup>	ASTM D1895
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength (Break)	6380	psi	ASTM D638
Tensile Elongation (Break)	350	%	ASTM D638
Coefficient of Friction	0.20		ASTM D1894
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Durometer Hardness (Shore D)	65		ASTM D2240
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Melting Temperature	277	°F	DSC

**Additional Information**

Molecular Weight, ASTM D4020: 200E4

Average particle size, Coal tar counter method: 25 µm

Particle size distribution, Coal tar counter method:

~20µm: 20

20 to 30µm: 55

30 to 40µm: 20

40µm ~: 5

The value listed at Melting Point DSC, was tested in accordance with ASTM D2117.

