

# Ultrapolymers HDPE

## UP203 Black Powder

Polyethylene for Rotational Moulding, linear high-density



### Description:

**UP203 Black Powder** is a new generation hexene linear high-density polyethylene for rotational moulding, based on **Lupolen 4021 K RM**.

Typical customer applications include agricultural and chemical storage containers and underground infrastructure applications. This product exhibits excellent ESCR and high impact strength at low temperatures. **UP203 Black Powder** is fully heat and UV stabilised resulting in good processing latitude, good colour retention and long life expectancy.

Tests have shown that this material is resisting against the harmful effect of biodiesel fuel.

**UP203 Black Powder** is not intended for use in medical- and pharmaceutical applications.

Physical Properties		Test method	Typical Value*	Unit
Melt flow index	190 °C/2.16 kg	ISO 1133	4.0	g/10 min
Density	23 °C	ISO 1183	0.9395	g/cm <sup>3</sup>
Tensile modulus	23 °C	ISO 527-1,-2	750	Mpa
Tensile stress at yield	23 °C	ISO 527-1,-2	19	Mpa
Tensile Impact Strength	Notched @ - 30 °C	ISO 8256	120	kJ/m <sup>2</sup>
	Notched @ 23 °C	ISO 8256	265	kJ/m <sup>2</sup>
Tensile Strain at break	23 °C	ISO 527-1, -3	> 450	%
Vicat softening temperature	A/50	ISO 306	114	°C
ESCR	50°C / 10% Igepal	ASTMD 1693	>1000	h

\*Values expressed are from base material. Density value is given of the base polymer. Final density of the black product is higher due to pigmentation

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\* The indicated values are typical values and should not be used for specification work.

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