

MDS r-PP “Prime”**>95% PP****RECYCLED POLYPROPYLENE (r-PP)**

UPRA recycles post-consumer plastic waste. We make impact in the most sustainable way and we want to be a frontrunner in the global challenge of making plastic packaging circular. Umincorp has developed a disruptive plastic recycling approach by using a unique technology called Magnetic Density Separation (MDS). This technology enables us to recycle plastics at high recovery rates with a low carbon footprint. We make plastics circular.

PRODUCT DESCRIPTION

UPRA MDS r-PP is a mixed color circular polypropylene (PP) grade supplied in flakes form for injection moulding applications. This 100% post-consumer-based material originates from Dutch household packaging waste. It has a medium melt flow rate and is characterized by a high molecular weight with easy colorability and good processing properties.

APPLICATION

UPRA MDS r-PP is used in injection moulded applications such as containers, crates, lids, caps & closures. This grade cannot be used for food applications.

TYPICAL PROPERTIES

Physical	Typical Value	Units	Test Method
Density	930	kg/m ³	ISO 1183-1A
Melt flow rate (MFR) 230°C/2,16kg	17	g/10 min	ISO 1133
PP content	> 95%	%	ISO 11357
Ash content 600°C	< 2	%	ISO 3451-1A

Mechanical	Typical Value	Units	Test Method
Charpy Impact Strength (unnotched)	35	kJ/m ²	ISO 179-1/1eU
Charpy Impact Strength (notched)	5	kJ/m ²	ISO 179-1/1eA
Strength	26	MPa	ISO 527-2 type 1A, 50 mm/min
Tensile Modulus (23 °C)	1280	MPa	ISO 527-2 type 1A, 1mm/min
Tensile strain at yield	8	%	ISO 527-2 type 1A, 50 mm/min
Tensile strain at break	18	%	ISO 527-2 type 1A, 50 mm/min
Flexural Modulus (23 °C)	1300	MPa	ISO 178, 2mm/min

MDS r-PP "A"**89,6 – 95% PP****RECYCLED POLYPROPYLENE (r-PP)****APPLICATION**

UPRA MDS r-PP "A" is used in injection moulded applications such as containers, crates, lids, caps & closures. This grade cannot be used for food applications.

TYPICAL PROPERTIES

Physical	Typical Value	Units	Test Method
Density	916	kg/m ³	ISO 1183-1A
Melt flow rate (MFR) 230°C/2,16kg	19.53	g/10 min	ISO 1133
PP content	>89.6%	%	ISO 11357
Ash content 600°C	< 1	%	ISO 3451-1A

Mechanical	Typical Value	Units	Test Method
Charpy Impact Strength (unnotched)	35	kJ/m ²	ISO 179-1/1eU
Charpy Impact Strength (notched)	5	kJ/m ²	ISO 179-1/1eA
Strength	26	MPa	ISO 527-2 type 1A, 50 mm/min
Tensile Modulus (23 °C)	1280	MPa	ISO 527-2 type 1A, 1mm/min
Tensile strain at yield	8	%	ISO 527-2 type 1A, 50 mm/min
Tensile strain at break	18	%	ISO 527-2 type 1A, 50 mm/min
Flexural Modulus (23 °C)	1300	MPa	ISO 178, 2mm/min

PROVISIONAL DATA SHEET

MDS r-PP "B"



80 – 89,6% PP

RECYCLED POLYPROPYLENE (r-PP)

APPLICATION

UPRA MDS r-PP "B" is used in injection moulded applications such as containers, pots and crates. This grade cannot be used for food applications.

TYPICAL PROPERTIES

Physical	Typical Value	Units	Test Method
Density	916	kg/m ³	ISO 1183-1A
Melt flow rate (MFR) 230°C/2,16kg	20.17	g/10 min	ISO 1133
PP content	80-89.6 %	%	ISO 11357
Ash content 600°C	< 2	%	ISO 3451-1A

Mechanical	Typical Value	Units	Test Method
Charpy Impact Strength (unnotched)	7.1	kJ/m ²	ISO 179-1/1eU
Charpy Impact Strength (notched)	2.3	kJ/m ²	ISO 179-1/1eA
Strength	24.3	MPa	ISO 527-2 type 1A, 50 mm/min
Tensile Modulus (23 °C)	1133	MPa	ISO 527-2 type 1A, 1mm/min
Tensile strain at yield	6.5	%	ISO 527-2 type 1A, 50 mm/min
Tensile strain at break	10	%	ISO 527-2 type 1A, 50 mm/min

WE MAKE PLASTICS CIRCULAR

All information contained in this provisional data sheet is based on typical values and intended for reference and comparison purposes only. The data above is provided in good faith but we do assume no liability for any inaccuracies or variations in actual values, nor do we assure the suitability of any material for any specific application. It is the buyer's responsibility to determine the suitability of the product for the intended application.