





PRODUCT BULLETIN

Maxxam[™] REC Recycled Polyolefin Formulations

Maxxam[™] REC Recycled Polyolefins are formulated with 25–100% recycled resin from post-industrial recycled (PIR) and post-consumer recycled (PCR) sources. They offer a more sustainable alternative to traditional polyolefin grades while achieving equivalent performance. Maxxam REC Polyolefins can be fully customized to meet specific application needs. They can be filled and reinforced to satisfy required performance characteristics and can be blended with glass, minerals, impact modifiers, colorants and stabilizer systems.

KEY CHARACTERISTICS

- Formulated with 25–100% recycled resin from PIR & PCR sources
- Reduces waste and supports the circular economy
- Achieves equivalent performance to standard polyolefin formulations
- Can be recycled at end of life
- Provides good stiffness, durability, impact resistance and UV stability
- Enables customized performance characteristics depending on application need

MARKETS AND APPLICATIONS

Maxxam REC Polyolefins are suitable for use across many industries and applications where traditional polyolefin materials are used, including:

- **Transportation** HVAC systems, engine guards, battery housings, flame retardant applications
- Industrial Structural parts, furniture
- **Consumer** Household appliances, personal care items, packaging, office supplies, food contact applications
- Electrical and Electronic Housings, buttons, junction boxes

SUSTAINABILITY BENEFITS

- Formulated with 25–100% recycled resin from PIR and/or PCR sources
- Reduces waste and supports the circular economy
- Reduces carbon footprint
- Can be recycled at end of life





TECHNICAL PERFORMANCE

CHARACTERISTICS	UNITS	Maxxam REC RS5200-5029 C BLACK X2	Maxxam REC MX5200-5036 HS I BLACK	Maxxam REC MX5200-5037 RS HS I BLACK	Maxxam REC MX5200-5038 RS HS I BLACK	Maxxam REC MX5200-5039 RS HS I BLACK
Filler/ Reinforcement	-	Unfilled	Unfilled	20% Mineral	40% Mineral	30% Glass Fiber
Recycled Content	-	95% PCR	97% PIR 75% PIR		55% PIR	65% PIR
Density (ISO 1183)	g/ccm	0.93	0.95	1.09	1.28	1.15
Tensile Modulus (ISO 527-1)	МРа	1250	950	1500	2150	4250
Tensile Stress (ISO 527-2)	MPa	25	175	10	15	50
Tensile Strain Break (ISO 527-2)	%	>20	>80	>30	17	4.5
Charpy Notched (ISO 179)	kJ/m	3	8	5	4	11

TECHNICAL PERFORMANCE

CHARACTERISTICS	UNITS	Maxxam REC RS5200-5026 RS NHFR BLACK 70	Maxxam REC FR H8 V2 BLACK RG 70	Maxxam REC L6 GF/30 H BLACK T RG 70	Maxxam REC MX5200-5027 RS HS BLACK RG	Maxxam REC MX5200-5028 RS HS BLACK RG	Maxxam REC C10 H-UV AS EP RG BLACK 70
Filler/ Reinforcement	-	30% Glass Fiber	Unfilled	30% Glass Fiber	30% Glass Fiber	40% Talcum	Unfilled
Recycled Content	-	37% PIR	90% PIR	55% PIR	35% PIR	50% PIR	25% PIR
Density (ISO 1183)	g/ccm	1.42	0.950	1.13	1.15	1.23	1.03
Tensile Modulus (ISO 527-1)	МРа	8250	1300	6100	6400	-	700
Tensile Stress (ISO 527-2)	MPa	71.0	30.0	70.0	70.0	28.0	15.0
Notched Izod (ISO 180)	kJ/m	-	4.0	10	5.8	2.7	No Break
Flame Rating @ 1.6mm thickness (UL 94)	-	V-0	V-2	НВ	НВ	НВ	НВ

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