Borcycle™ PCR solutions

The new Borcycle™ portfolio of grades with post-consumer recycled (PCR) content

EverMinds™

Contains recycled material

BOREALIS

بروج Borouge

Driving Tomorrow

Value-added solutions with enhanced sustainability

An essential pillar of the Borealis EverMinds™ philosophy is that customer centricity is driving innovation in polyolefins. As the automotive industry pivots towards electric powertrains, efforts to reduce vehicular weight that extend range and lower overall CO_2 footprint are taking on increased urgency. Automotive OEMs and Tier One suppliers require a global supply of a wider range of lighter weight material solutions that fulfil stringent performance characteristics.

Borealis is helping its automotive partners raise the share of recycled plastics in vehicles by developing innovative polyolefin-based solutions that are composed of both virgin and increased post-consumer recyclate (PCR) content levels.
In 2014, Borealis was one of the first virgin polyolefin suppliers to launch under its Daplen™ brand a range of dedicated polypropylene (PP) compound solutions which included PCR for use in automotive applications. The trusted Daplen portfolio, which includes three proven high-quality compounds developed in Europe, has now been rebranded as Borcycle™ ME2220SY, Borcycle™ MD2550SY and Borcycle™ MD3230SY.
Underscoring our global supply capacity, in 2015 Borealis Brasil also launched three additional grades for the South American market: Borcycle™ MG1490SYB, Borcycle™ MG2690SYB and Borcycle™ MG4490SYB.

Borealis' customers and partners can rely on the availability of ready-made, high-end grades that deliver key advantages:

- Delivers performance equivalent to 100 %-virgin PP grades
- Offers ready availability at consistent high quality, thus allowing for high volume production
- Supports OEMs in achieving their sustainability goals through the use of PCR in automotive parts
- Full support from Borealis technical service and modelling and simulation teams to bring these grades into serial production, substituting virgin PP grades

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Together for a more Circular Economy.

We take action to shift towards a circular mindset.

EverMinds™ is a platform that brings stakeholders together to constantly innovate our technologies and product portfolio with circularity of plastics at the core.
The platform is a catalyst for better economic, environmental and societal outcomes and an inspiration constantly reminding us to always act consciously with the lifecycle of materials in mind.

Automotive Borcycle™ portfolio of PCR grades:

Borcycle™ ME2220SY

- 25 % PCR content | 20 % talc | 55 % virgin material
- Primarily intended for interior automotive applications such as door and trunk claddings and trims
- High-level quality, enhanced sustainability

Borcycle™ ME2220SY		
Density	kg/m³	1,070
MFR 230 °C/2.16 kg	g/10 min	15
Flexural modulus	MPa	2,400
Charpy NIS +23°	kJ/m²	5

Borcycle™ MD2550SY

- 50 % PCR content | 20 % talc | 30 % virgin material
- Intended mainly for UTB and exterior applications such as bumper components and exterior trims
- Good quality, enhanced sustainability and cost benefit

Borcycle™ MD2550SY		
Density	kg/m³	1,080
MFR 230 °C/2.16 kg	g/10 min	5
Flexural modulus	MPa	2,300
Charpy NIS +23°	kJ/m²	3.3

Borcycle™ MD3230SY

- 25 % PCR content | 30 % talc | 45 % virgin material
- Intended for use in UTB and exterior applications
- Good quality, enhanced sustainability and cost benefit

Borcycle™ MD3230SY		
Density	kg/m³	1,150
MFR 230 °C/2.16 kg	g/10 min	11
Flexural modulus	MPa	2,600
Charpy NIS +23°	kJ/m²	3.5

*These products are partially made of recycled materials, adhering to the EverMinds™ standard.

Borcycle™ ME1490SYB

- 45 % PCR content | 10 % talc | 45 % virgin material
- Intended mainly for exterior applications, as wheel liner

Borcycle™ ME1490SYB		
Density	kg/m³	970
MFR 230 °C/2.16 kg	g/10 min	12
Flexural modulus	MPa	1,500
Charpy NIS +23°	kJ/m²	6

Borcycle™ ME2690SYB

- 70 % PCR content | 20 % talc | 10 % virgin material
- Intended mainly for exterior and UTB applications, as baffles

Borcycle™ MD2690SYB		
Density	kg/m³	1,070
MFR 230 °C/2.16 kg	g/10 min	22
Flexural modulus	MPa	2,600
Charpy NIS +23°	kJ/m²	3,5
Fogging	mg	1,6

Borcycle™ ME4490SYB

- 25 % PCR content | 30 % talc | 45 % virgin material
- Intended for use in UTB and exterior applications
- Good quality, enhanced sustainability and cost benefit

Borcycle™ ME4490SYB		
Density	kg/m³	1,260
MFR 230 °C/2.16 kg	g/10 min	11
Flexural modulus	MPa	3,400
Charpy NIS +23°	kJ/m²	3
Fogging	mg	1,6

*These products are partially made of recycled materials, adhering to the EverMinds™ standard.

For more information visit www.borealisgroup.com · www.borealiseverminds.com · www.borealisdrivingtomorrow.com

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