

Polypropylene

**Borcycle™ UG521MO-74**

**Recycled PP Compound**



Accelerating Action  
on Circularity

**Description**

Borcycle™ UG521MO-74 is an integrated virgin block copo PP / recycled PP solution with 55% post-consumer recycle. The post-consumer recycle is made from post-consumer plastic waste which is pre-sorted, sorted, shredded, washed, dried, extruded (including melt filtration, at a level of 110 microns) and pelletized, resulting in a circular polypropylene grade with minimum PP content above 95% (measured via DSC). The material is sold in pellet form.

Borcycle™ UG21MO-74 is designed for high-speed injection moulding and contains nucleating and demoulding additives. Products originating from this grade have excellent balance of stiffness and impact strength at ambient and cold temperature and good demoulding properties.

Borcycle™ UG521MO-74 is intended for injection moulding. “-74” refers to the colour version of the product, a visual indication of “dark grey”. While recyclates may exhibit slight color variations between batches, our innovative integration of virgin PP into the ready-made PP compound ensures an optimised colour consistency.

The product is not intended for use in beverages, drinking water contact, food contact, medical, pharmaceutical or healthcare applications.

UG21MO-74 is part of EuCertPlast according to European Standard EN15343:2007, and compliant with EN 15345:2008 and UNI 10667-3.

Cas No. 9010-79-1

PCR recycle Good gloss  
High stiffness and impact strength balance Very low mould deposits  
Good demoulding properties

**Applications**

Borcycle™ UG521MO-74 is intended for following applications:

Caps and closures for non-food applications Injection-moulded non-food applications

**Physical properties**

| Property                                 | Typical value * | Unit    | Test method   |
|--|-----------------|---------|---------------|
| Melt flow rate ( 230 °C/2.16 kg)         | 27              | g/10min | ISO 1133-1    |
| Charpy impact strength, notched (-20 °C) | 2               | kJ/m²   | ISO 179-1/1eA |
| Tensile stress at yield ( 50 mm/min)     | 27              | MPa     | ISO 527-2     |
| Charpy impact strength, notched ( 23 °C) | 6               | kJ/m²   | ISO 179-1     |
| Tensile modulus ( 1 mm/min)              | 1350            | MPa     | ISO 527-2     |

\* Data should not be used for specification work

**Processing techniques**

This product is easy to process with standard injection moulding machines.

| Processing setting            | Typical value/range |
|-------------------------------|---------------------|
| Melt temperature              | 210 - 260 °C        |
| Holding pressure <sup>1</sup> | 200 - 500 bar       |
| Mould temperature             | 30 - 40 °C          |
| Injection speed               | high bar            |

Borcycle™ is a trademark of the Borealis Group



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<sup>1</sup> minimum to avoid sink marks.

Shrinkage 1 - 2%, depending on wall thickness and moulding parameters.

## Packaging and storage

Borcycle™ UG521MO-74 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

## Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available in our website [www.borealisgroup.com](http://www.borealisgroup.com).

## Sustainability aspects

Borealis is ever mindful of the impact of our products on the planet. We promote Design for Circularity (DfC) and Design for Recycling (DfR) to conserve natural resources and to reduce the environmental impact of products over their entire lifetime (including production, use phase and after phase). DfR helps ensure that material can be effectively recycled while maximizing the material performance efficiency.

Further information on sustainability and Design for Recycling (DfR) can be found from our websites [www.borealisgroup.com](http://www.borealisgroup.com) and [www.borealiseverminds.com](http://www.borealiseverminds.com).

## Regional Availability

Europe

For information on regional availability please contact Borealis Sales Representative.

## Disclaimer

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication; however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borealis makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of any Borealis product in conjunction with any other products and/or materials. The information contained herein relates exclusively to our products when not used in conjunction with any other material unless as specifically provided for in the test methods stated above.