

Based on the rapidly developing market for recycled plastics, and the need to use them in food-contact applications, Borealis offers plastics based on monomer derived from chemically recycled feedstock, under the brand of Borcycle™ C.

In our understanding of the currently valid regulations as explained below, Borcycle™ C products are covered by the current food contact legislation in EU and meet the purity requirements to be suitable for such applications.

In EU, materials and articles intended to come into contact with food are subject to the general provisions as defined by the framework regulation (EC) 1935/2004.

Its article 5 requires specific measures for the groups of materials and articles listed in its Annex I and for recycled materials and articles.

The specific measure for plastic materials is represented by regulation (EU) No. 10/2011 as amended

Article 5: only substances included in the Union list of authorised substances, as represented by its Annex I, may be intentionally used. This list, amongst other, comprises all permitted monomers.

Article 8 defines that “*substances used in the manufacture of plastic layers in plastic materials and articles shall be of a technical quality and a purity suitable for the intended and foreseeable use of the materials or articles*”. No further purity requirements are defined for the monomers as used for the manufacturing of Borealis polyolefins.

Recycled plastic materials are subject to COMMISSION REGULATION (EU) 2022/1616 of 15 September 2022 *on recycled plastic materials and articles intended to come into contact with foods, and repealing Regulation (EC) No 282/2008.*

its “whereas” (6) explains the exemption of certain substances from the scope of Reg 2022/2016:

*“Regulation (EU) No 10/2011 requires that substances used to manufacture plastic materials and articles are of a suitable purity, and that remaining impurities can be identified so that they can be subject to risk assessment. As single substances can be purified to a level suitable to this purpose, **it does not generally limit production methods for the substances on the Union list of authorised substances. It is thus also possible to manufacture those substances from any source, including therefore from waste materials.** Moreover, substances produced from waste and that are obtained at a high level of purity are indistinguishable from the same substances produced otherwise. **Therefore the manufacture of plastic materials and articles with substances obtained at a high level of purity from waste materials, and that are included in the Union list established by Regulation (EU) No 10/2011, or subject to certain derogations, should be subject to that Regulation (i.e. 10/2011), whereas other substances in which incidental contaminants cannot be assumed a priori to be absent or be easily excluded, including mixtures, oligomers, and polymers produced from waste should be subject to this Regulation (i.e. 2022/2016)...”***

Borcycle is a trademark of the Borealis group.

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This exemption is implemented into the regulation by its article 1 (subject matter and scope)

3. This Regulation shall not apply to the use of waste to manufacture substances included in the Union list of authorised substances in accordance with Article 5 of Regulation (EU) No 10/2011, and to manufacture substances subject to Article 6(1), (2), and (3)(a) thereof, when intended for subsequent use in accordance with that Regulation.

Borcycle™ C products are based on monomers from feedstock recycling. In a pyrolysis process plastic waste is chemically depolymerised into a fuel-like mixture. The resulting pyrolysis oil can serve as a feedstock, similar to crude oil, for traditional monomer production.

Consequently, Borealis' Borcycle™ C products meet the same purity requirements as any virgin polymer, based on monomers derived from a conventional crude oil process.

The related Borcycle™ C products therefore are subject to regulation (EU) 10/2011 as amended.

Prepared by Borealis Group Product Stewardship

Disclaimer

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication.

The legislation cited above applies to the final packaging, which is intended to come or is brought into contact with foodstuff. This statement however is restricted to the Borealis product as it leaves production. It is the customers responsibility to verify compliance with applicable legislation of the final packaging under actual and foreseeable conditions of use.

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. No liability can be accepted in respect of the use of Borealis' products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

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