



# RIBLENE® MM 20 BCA

LDPE  
Low density polyethylene bio circular attributed



## SUSTAINABILITY

The product Riblene MM 20 BCA 'Bio Circular attributed' is a highly sustainable LDPE produced using bionafta from renewable raw materials together with traditional raw materials. In order to attribute the sustainable feedstock component to the final product Versalis applies the Mass Balance approach, a recognized methodology that allows to trace the flow of materials along the value chain and to assign the sustainability characteristic of the raw material to the final product on a documentary basis. Riblene MM 20 BCA provides the same chemical composition and physical-mechanical performance of the traditional grade, in addition is accompanied by a sustainability declaration that certifies the share of bio attributed product. It is a medium fluidity low density polyethylene resin (LDPE). The production of Riblene MM 20 BCA allows to contribute to the circular economy, since the bionafta used derives from waste from industrial processing of organic substances (e.g. used cooking oils). Riblene MM 20 BCA will be bio circular attributed for 100%. The exact amount of 'bio circular attributed' product will be reported in the sustainability certificate issued upon the delivery of the product.

## MAIN PROPERTIES

| Resin Properties                | Value | Unit              | Test method     |
|---------------------------------|-------|-------------------|-----------------|
| Melt Flow Rate (190 °C/2,16 kg) | 3,5   | g/10min           | ISO 1133        |
| Melt Flow Rate (190 °C/5 kg)    | -     | g/10min           | ISO 1133        |
| Melt Flow Rate (190 °C/21,6 kg) | -     | g/10min           | ISO 1133        |
| Density                         | 0,920 | g/cm <sup>3</sup> | ISO 1183        |
| Melting Point                   | 110   | °C                | Internal Method |
| Brittleness temperature         | < -75 | °C                | ASTM D 746      |
| Vicat softening point (1 kg)    | 90    | °C                | ISO 306/A       |
| Mechanical Properties *         | Value | Unit              | Test method     |
| Tensile stress at yield         | 11    | MPa               | ISO 527         |
| Tensile stress at break         | -     | MPa               | ISO 527         |
| Tensile strain at yield         | -     | %                 | ISO 527         |
| Flexural modulus                | 130   | MPa               | ISO 178         |
| Hardness Shore A                | -     | Shore A           | ISO 868 A       |
| Hardness Shore D                | 47    | Shore D           | ISO 868 A       |



## MAIN APPLICATIONS

Riblene MM 20 BCA is suitable for injection moulding, compound and masterbatch applications. Riblene MM 20 R BCA is recommended for caps, closures, houseware and high thickness articles. Its fluidity and density values guarantee good processability and excellent flexibility characteristics to the products.

## PROCESSING NOTES

Processing conditions are depending on several parameters: the shape of the part to be manufactured, the localisation of the injection point, the injection moulding machine and the cooling of the mould. Typical processing conditions:

Temperature profile of the barrel (°C): 170 - 230

Temperature of the mould (°C): 10 - 30

## STORAGE AND HANDLING

Riblene MM 20 BCA is supplied in pellet form. This material may readily be conveyed and bulk fed through equipment designed for conventional pelletized polyethylene resin, provided the equipment is designed to prevent accumulation of the fines and dust particles that are contained in all polyethylene resins. These fines and dust particles can, under certain conditions, pose an explosion hazard. We recommend that the conveying system used be equipped with filters of adequate size, operated and maintained in such a manner to ensure that no leaks develop and earthed adequately. We further recommend that good housekeeping should be practiced throughout your facility. The product should be stored in dry conditions at temperatures below 50 °C and protected from sunlight. Improper storage can initiate degradation which results in odor generation, color changes and can have negative effects on the physical properties of the product. Before using this product, it is recommended to read and understand the relevant Safety Data Sheet.

## AVAILABILITY

Contact the Versalis sales office nearest to you regarding availability and your specific application requirements.

## FOOD CONTACT STATUS

Riblene MM 20 BCA complies with the rules and regulations of the European Union, as well as other countries, regarding the use of plastic materials in food contact applications. Certificates of compliance are available upon request.

