



## Technical Data Sheet



# GREENFLEX® ML 60 BCA

EVA  
Ethylene vinyl acetate copolymer bio circular attributed



### SUSTAINABILITY

The product Greenflex ML 60 BCA 'Bio Circular attributed' is a highly sustainable EVA 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. Greenflex ML 60 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 an ethylene vinyl acetate copolymer (EVA) for injection moulding, compounding and extrusion. The production of Greenflex ML 60 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). Greenflex ML 60 BCA will be bio circular attributed for 72%. 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) | 2,5   | g/10min           | ISO 1133        |
| Vinyl acetate content           | 28    | %                 | Internal Method |
| Density                         | 0,952 | g/cm <sup>3</sup> | ISO 1183        |
| Melting Point                   | 74    | °C                | Internal Method |
| Brittleness temperature         | < -80 | °C                | ASTM D 746      |
| Vicat softening point (1 kg)    | 44    | °C                | ISO 306/A       |
| Mechanical Properties *         | Value | Unit              | Test method     |
| Tensile stress at yield         | 4     | MPa               | ISO 527         |
| Tensile stress at break         | -     | MPa               | ISO 527         |
| Elongation at break             | -     | %                 | ISO 527         |
| Flexural modulus                | 10    | MPa               | ISO 178         |
| Shore A                         | 75    | Shore A           | ISO 868 A       |
| Shore D                         | 32    | Shore D           | ISO 868 A       |

(\*) Values are referred to injection moulded specimens. Actual properties are typical and may vary depending upon operating conditions.


**GREENFLEX® EVA** / Ethylene vinyl acetate copolymer bio circular attributed

**ML 60 BCA**

## MAIN APPLICATIONS

Greenflex ML 60 BCA is recommended for the production of foamed and crosslinked sheets for shoes, carpet supports and gaskets. Greenflex ML 60 BCA allows the production of products with very high elasticity.

## PROCESSING NOTES

Greenflex ML 60 BCA is readily processable by the latest injection moulding equipments with excellent results. Typical processing conditions: \*\*

Operation temperature (°C): 140 - 190

Mould temperature (°C): 10 - 30

(\*\*) 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.

## STORAGE AND HANDLING

Greenflex ML 60 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

Greenflex ML 60 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.

## TECHNICAL MANAGEMENT POLYETHYLENE

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**IMPORTANT:** please consult the relevant safety data sheet for more detailed information. The information and data presented herein are to the best of our knowledge true and accurate but no warranty or guarantee, expressed or implied, is made nor is any liability accepted with respect to the use of such information and data. Versalis is available to provide the guaranteed values for each product on demand

**DISCLAIMER:** it is the sole responsibility of the end-user to determine the safety, the regulatory compliance as well as the technical suitability of the product for the intended application. The product is not intended for use in medical devices and pharmaceutical applications; Versalis declines all responsibility and cannot be held liable in case of use in the above-mentioned applications.