

Technical data sheet

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GREENFLEX®

MH 40

EVA

Ethylene vinyl acetate copolymer

Greenflex MH 40 is an ethylene vinyl acetate copolymer (EVA) for injection moulding and extrusion. Items produced with Greenflex MH 40 show high elasticity and good mechanical properties.

Main Application

Greenflex MH 40 is recommended for the production flexible items, foamed and crosslinked sheets for shoes.

Main Properties

| Resin Properties | Value | Unit | Test Method |
|---------------------------------|-------|---------|-----------------|
| Melt Flow Rate (190 °C/2,16 kg) | 1,8 | g/10min | ISO 1133 |
| Vinyl acetate content | 17 | % | Internal method |
| Density | 0,938 | g/cm3 | ISO 1183 |
| Melting Point | 88 | °C | Internal method |
| Brittleness temperature | < -80 | °C | ASTM D 746 |
| Vicat softening point (1 kg) | 65 | °C | ISO 306/A |

| Mechanical Properties * | Value | Unit | Test Method |
|-------------------------|-------|---------|-------------|
| Tensile stress at yield | 5,6 | MPa | ISO 527 |
| Tensile stress at break | - | MPa | ISO 527 |
| Elongation at break | - | % | ISO 527 |
| Flexural modulus | 40 | MPa | ISO 178 |
| Hardness Shore A | 89 | Shore A | ISO 868 A |
| Hardness Shore D | 36 | Shore D | ISO 868 A |

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

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Greenflex MH 40 is readily processable by the latest injection moulding equipments with excellent results. Typical processing conditions: **

| Temperature profile of the barrel | (°C) | 140 - 200 |
|-----------------------------------|------|-----------|
| Temperature of the mould | (°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 MH 40 is supplied in pellet form. This material may readily be conveyed and bulk fed through equipment designed for conventional pelletised 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 practised 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 odour generation, colour 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 MH 40 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.