

# Technical Data Sheet

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## CLEARFLEX®

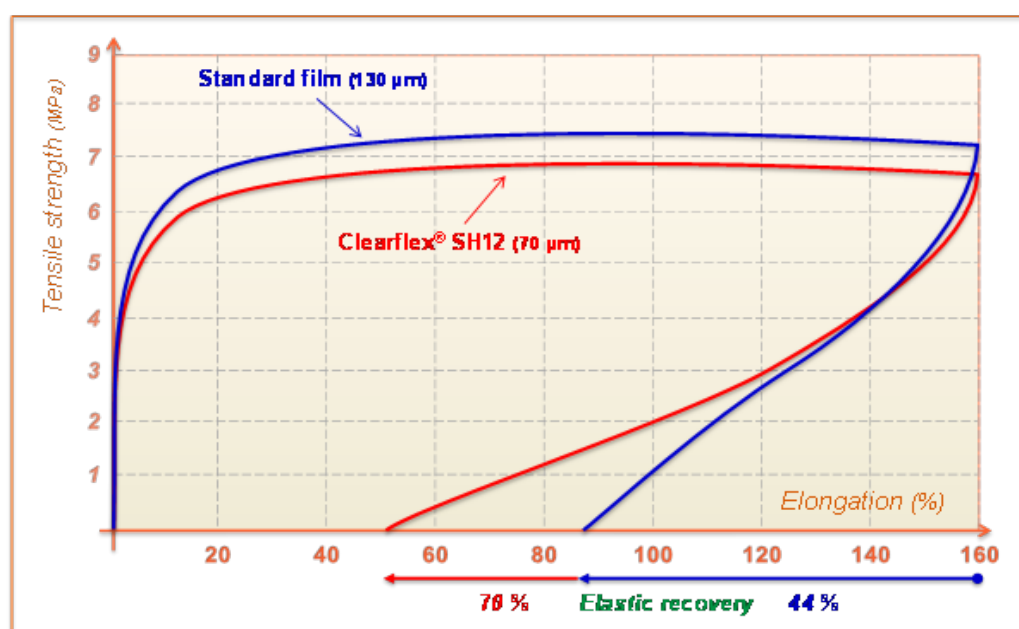
## SH 12

Clearflex SH 12 is an innovative compound made by polyethylene and polymers having elastomeric properties, suitable for multilayer blown film extrusion. Thanks to its macromolecular structure, Clearflex SH 12 allows to obtain films that reach transverse deformations over 160%, having optimal elastic memory, excellent puncture resistance and good transparency.

### Main Applications

Clearflex SH 12 has been designed for the stretch hood production. Clearflex SH 12 is used in the core layer of multilayer films, it can provide innovative and sustainable solutions for a wide range of applications including: beverage packaging, electrical appliances of all sizes, construction materials, bags of cement and fertilizers.

### Elastic Memory



### Main Properties

Resin Properties	Value	Unit	Test Method
Melt Flow Rate (190 °C/2,16 kg)	0,25	g/10min	ISO 1133
Density	0,900-0,910	g/cm <sup>3</sup>	ISO 1183
Film properties*	Value	Unit	Test Method
Tensile Stress at yield MD	4	MPa	ISO 527-3
Tensile Stress at yield TD	4	MPa	ISO 527-3
Tensile Stress at break MD	33	MPa	ISO 527-3
Tensile Stress at break TD	29	MPa	ISO 527-3
Elongation at break MD	750	%	ISO 527-3
Elongation at break TD	740	%	ISO 527-3
Puncture	800	N/mm	ASTM D 5748

(\* ) Typical value for a film extruded between 180 and 210°C with BUR 3,5 and thickness 80 µm. Actual properties are typical and may vary depending upon operating conditions and additive package.

Clearflex ® is a registered trademark of Versalis

## Processing notes

Clearflex SH 12 is easily processable using blown film technology. Melt temperature should be between 180 to 210 °C. The recommended thickness in coextrusion with a film structure 20//60//20 goes from 40 to 80 µm.

## Storage and Handling

Clearflex SH 12 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

Clearflex SH 12 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 and Applications Development

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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.