



PETG SPECIALITIES

Genius 80 M

Selenis Genius 80 M is a Glycol modified PET resin commonly known as "PETG". This product features perfect sealability, superior gloss, clarity, thermoformability and shrink properties. Genius 80 M has been fine-tuned for extrusion of film and sheet in a wide range of thicknesses. Primary films made from Genius 80 M may be mono-axially stretched and converted to heat shrink sleeves.

FEATURE

- Exceptional sealability
- Superior clarity and gloss
- No crystallisation
- Shrink properties

BENEFIT

- Can seal to itself, coated board or other substrates
- Improved aesthetics at point of sale
- Allows for heavy gauge sheet extrusion
- Offers the highest ratio of shrinkability for sleeves

APPLICATIONS



Blister Packaging



Medical Device Packaging



Heavy Gauge Sheets



Heat Shrink Sleeves



3D Laminate Furniture Films



Credit Cards



Specifications

This table contains Selenis Genius 80 M characteristics and their methods of analysis. Some properties are subject to limits; others are presented with their typical values. Small variations of the typical values do not affect the application performances of the polymer. All properties are measured under laboratory conditions by the analytical method shown. Limits in these specifications are applicable only to data obtained by the referenced test methods. Different methods or conditions of analysis may give rise to different values. A Certificate of Analysis with representative average values of certain properties will accompany purchased material. Selenis Genius 80 M is offered in 1,100 kg big-bags and in bulk overseas containers.

Properties	Test Methods	Units	Values
Intrinsic Viscosity	ISO 1628-5	dl/g	0.80 ± 0.02
Color b^* L^*	ASTM D6290		≤ 1 ≥ 64
Glass Transition Temperature	ASTM D3418	°C	80
Specific Density		g/cm ³	>1.29
Bulk Density		g/cm ³	0.73
Moisture		%	≤ 0.3
Particle Size		mg/20 chips	320 ± 50
Pellet Shape			Cylindrical

Food Approval

This resin complies with the compositional requirements of the European Regulation Nr 10/2011 on Plastic Food Contact Materials (Repeals 2002/72/EC plastics including 6 amendments).

Storage and Handling Conditions

Selenis Genius 80 M is an inert material in storage and no hazards are likely to arise. However the polymer should be stored in an area properly protected from risk of fire.

Selenis Genius 80 M should be stored in the original container, tightly closed in a dry, cool and well-ventilated place. If the container is stored outside, avoid direct sunlight exposure.

Processing

In order to obtain maximum product performance, Selenis Genius 80 M should be dried to achieve a moisture level below 0.004 % (40 ppm) before process. Typical drying requirements are a dehumidifying air hopper dryer with regenerative desiccant beds, -40°C dew point air, 65° C drying temperature, at least 5 – 6 hours. During drying it is important that the temperature of the process air does not exceed 70°C in order to avoid chips from sticking together in the hopper of the dryer.

Typical melt temperatures are between 180°C to 250°C, chosen in function of the needs of the transformation technology.



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Visit our website where you will find information
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information and applications at
www.selenis.com

All Selenis PET Specialities are produced at Selenis Portugal, S.A.

The information contained herein is based on the present state of our knowledge and is intended to describe our products. It is based on tests believed to be reliable. The values shown are typical physical values and may shift slightly as more is accumulated. We do not guarantee the results to be obtained by others under different conditions. Users must see this sheet as informative and should take their own decisions in terms of product adequacy. If the product is handled incorrectly and in non-recommended application the supplier will not be responsible. All information is subject to change without notice. Notwithstanding the foregoing information contained herein is for informational purpose only and Selenis assumes no liability in connection herewith.

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