



DuPont™ Surlyn® 6120

Description

Product Description

DuPont™ Surlyn® 6120 is a magnesium ionomer that provides good toughness, high stiffness, and durability. It is positioned in the high acid, medium neutralization area of the ionomer spectrum. In golf ball covers, Surlyn® 6120 can be used alone or in blends with other ionomers to provide improved cut resistance and impact durability, as well as good resiliency. Typical performance properties are shown below:

Product Characteristics

Processing Method	• not yet determined
Material Status	• Commercial: Active
Availability	• Globally
Cation Type	• Mg
Uses	• Sporting Goods
Manufacturer / Supplier	• DuPont Packaging & Industrial Polymers

Properties

Physical

	Nominal Values	Test Method
Density	0.95g/cm ³	ASTM D792 – ISO 1183
Melt Flow Rate	1.1g/10 min	ASTM D1238 – ISO 1133

Thermal

	Nominal Values	Test Method
Melting Point (DTA)	85°C (185°F)	ASTM D3418 – ISO 3146
Vicat Softening Point	60°C (140°F)	ASTM D1525 – ISO 306
Freezing Point (DTA)	39°C (102°F)	ASTM D3418

Mechanical

	Nominal Values	Test Method
Flexural Modulus	517MPa (74985psi)	ASTM D790
Tensile Elongation @ Break	270%	ASTM D638 – ISO 527-2
Tensile Strength @ Break	35.9MPa (5207psi)	ASTM D638 – ISO 527-2
Tensile Strength @ Yield	20MPa (2901psi)	ASTM D638

Hardness

	Nominal Values	Test Method
Durometer Hardness	67	ASTM D2240 – ISO 868

Optical

Nominal Values	Test Method
----------------	-------------

Haze (0.250 in)

not yet determined

ASTM D1003

Processing Information

Safety & Handling

Surlyn® 6120 as supplied by DuPont is not considered a hazardous material. As with any hot material, care should be taken to protect the hands and other exposed parts of the body when handling molten polymer. At recommended processing temperatures, small amounts of fumes may evolve from the resins. When resins are overheated, more extensive decomposition may occur. Adequate ventilation should be provided to remove the fumes from the work area. Disposal of scrap presents no special problems and can be by landfill or incineration in a properly operated incinerator. Disposal should comply with local, state, and federal regulations. Resin pellets can be a slipping hazard. Loose pellets should be swept up promptly to prevent falls.

For more detailed information on the safe handling and disposal of DuPont resins, a Product Safety Bulletin and OSHA Material Safety Data Sheet can be obtained from the DuPont Packaging Products sales office serving you.

Because DuPont cannot anticipate or control the many different conditions under which this information and/or product may be used, it does not guarantee the applicability or the accuracy of this information or the suitability of its products in any given situation. Users of DuPont products should make their own tests to determine the suitability of each such product for their particular purposes. The data listed herein falls within the normal range of product properties but they should not be used to establish specification limits



The miracles of science®