



DuPont™ Surlyn® 8660

Description

Product Description

DuPont™ Surlyn® 8660 thermoplastic resin is an advanced ethylene/methacrylic acid (E/MAA) copolymer, in which the MAA acid groups have been partially neutralized with sodium ions. The amount of MAA and neutralization levels for this grade are optimized for ease of compounding with high loadings of various color pigments. The resin is easily injection molded, and also is used in foamed applications. It complies with the provisions of U.S. Food and Drug Administration (FDA) Title 21 Code of Regulations 177.1330.

Product Characteristics

Processing Method

- Injection Molding
- Foam Processing

Material Status

- Commercial: Active

Availability

- Globally

Cation Type

- Na

Uses

- not yet determined

Manufacturer / Supplier

- DuPont Packaging & Industrial Polymers

Properties

Physical

Density

Nominal Values

0.95g/cm³

Test Method

ASTM D792 – ISO 1183

Melt Flow Rate (Condition E, 2.16kg)

10g/10 min

ASTM D1238 – ISO 1133

Thermal

Brittle Temperature

–75°C (–103°F)

ASTM D746

Melting Point (DTA)

203°F (95°C)

ASTM D3418 – ISO 3146

Vicat Softening Point (Rate B)

160°F (71°C)

ASTM D1525 – ISO 306

CLTE, Flow (–20°C to 32°C)

150µm/m/°C

ASTM D696

Freezing Point (DTA)

165°F (74°C)

ASTM D3418

Mechanical

Abrasion Resistance

170NBS Index

ASTM D1630

Flexural Modulus (73 °F)

230MPa (33359psi)

ASTM D790

Flexural Modulus (–4 °F)

646MPa (93694psi)

ASTM D790

Ross Flex (compression molded, 3.2mm thick, pierced 2.5mm wide, 73 °F)	1500cycles	ASTM D1052
Ross Flex (-20 °F)	100cycles	ASTM D1052
Tensile Elongation @ Break (73 °F)	470%	ASTM D638 – ISO 527-2
Tensile Strength @ Break (73° F)	23.4MPa (3394psi)	ASTM D638 – ISO 527-2
Tensile Strength @ Yield (Type IV bars, compression molded, 5.0 cm/min, 73 °F)	13.1MPa (1900psi)	ASTM D638

Impact	Nominal Values	Test Method
Notched Izod Impact (73 °F)	16ft-lb/in	ASTM D256
Tensile Impact Strength (73 °F)	345ft-lb/in ²	ASTM D1822
Tensile Impact Strength (-40 °F)	270ft-lb/in ²	ASTM D1822

Hardness	Nominal Values	Test Method
Durometer Hardness (Shore D)	62	ASTM D2240 – ISO 868

Optical	Nominal Values	Test Method
Haze (0.250 in)	11%	ASTM D1003

Elastomer	Nominal Values	Test Method
Tear Strength (73 °F)	not yet determined	ASTM D624

Processing Information

FDA Status Surlyn® industrial resins are available that comply with US FDA 21 CFR 177.1330. For more information contact your DuPont sales office.

Safety & Handling Surlyn® 8660 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.

Read and understand the Material Safety Data Sheet (MSDS) before using this product

DuPont Worldwide

Asia Pacific

DuPont Singapore PTE Ltd.
1 Maritime Square #07-01
World Trade Centre
Singapore 0409
Telephone 65-273-2244
Fax 65-272-7494

Australia

DuPont (Australia) Ltd.
254 Canterbury Road
Bayswater, Victoria 3153
Australia
Telephone 3-9721-5900
Fax 3-9721-5650

Brazil/South America

DuPont do Brasil, S.A.
Alameda Itapecuru, 506
06454-080 Barueri, SP Brasil
Telephone 5-11-74166-8542 /
8393
Fax 55-11-4166-8720

Canada

DuPont Canada Inc.
P.O. Box 2200, Streetsville
7070 Mississauga, Road
Mississauga, ONT L5M 2H3
Telephone (Canada Only):
800-268-3943 /
905-821 5953
Fax 905-821-5230

Europe

DuPont de Nemours Int'l.
S.A.
2, Chemin du Pavillon Box 50
CH-1218 Le Grand Saconnex
Geneva, Switzerland
Telephone 022-717-51-11
Fax 022-717-55-00

Japan

Mitsui-DuPont
Polychemicals Co., Ltd.
Kasumigaseki Bldg. 24F
3-2-5 Kasumigaseki
Chiyoda-ku, Tokyo 100, Japan
Telephone 813-3580-5531
Fax 813-3592-1540

Mexico/Central America

DuPont, S.A. de C.V.
Homero 206 Anexo Planta Alta
Col. Chapultepec Morales
11570, D.F. Mexico
Telephone 52-55-57-22-1000
Fax 52-55-57-22-1308

United States

DuPont Packaging and
Industrial Polymers
Barley Mill Plaza 26-2122
Lancaster Pike & Route 141
P.O. Box 80026
Wilmington, DE 19880-0026
Telephone 302-774-1161
Toll-free (USA) 800-438-7225
Fax 302-999-4399

<http://www.dupont.com/>
info@dupont.com

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 or used alone as the basis of design.

Disclosure of this information is not a license to operate or a recommendation to infringe a patent of DuPont or others.

Copyright© 1995-2004. E.I. duPont de Nemours and Company. All Rights Reserved. The DuPont Oval Logo, DuPont™, The miracles of science™ and all products denoted with ™ or ® are trademarks or registered trademarks of E.I. duPont de Nemours and Company or its affiliates.

This data sheet is effective as of 3/29/2004, and supersedes all previous versions.



The miracles of science®