

DuPont Adhesive Offerings

FOR NON c-Si TECHNOLOGIES

Surlyn® Ionomer Resins and Bynel® Resins

Photovoltaic Application

DuPont has a long line of co-polymer product offerings for use in a wide range of applications in industrial markets. DuPont™ Surlyn® and DuPont™ Bynel® are two offerings that provide unique families of thermoplastic polymers designed to bond a wide variety of substrates in a variety of processes.

Films made with these products have advantages of being solventless adhesive solutions. In addition, these materials can also be processed in traditional extrusion equipment.

DuPont™ Surlyn® Ionomer Resins

The Surlyn® family of material offerings has been utilized as an encapsulant and as an adhesive. The thickness of the material is 1-8 mil; 25-200 micron when used as an adhesive.

Advantages of using Surlyn® adhesive include:

- Chemical resistance
- Outstanding optics

DuPont™ Bynel® Resins

The Bynel® family of adhesive resins is the result of years of development effort by a dedicated technical organization relying upon DuPont world renowned capabilities in adhesion science and polymer modification.

Bynel® adhesive resins are extrudable and bond together substrates that normally do not adhere to one another. These 100% solid adhesives eliminate the need for solvents and the energy intensive processes required to dry solvent- and aqueous-based adhesives. They can be extruded as adhesive films and thermally laminated between solid substrates.

Advantages of using Bynel® adhesive include:

- Wide range of chemistries and rheology
- “Functionalized” with reactive monomers that covalently or ionically bond to various substrates



The miracles of science™

For more information on Surlyn®, Bynel® or other DuPont Photovoltaic Solutions, please contact your local representative:

Europe

Du Pont de Nemours (Deutschland) GmbH
Axel Beyer
Du Pont Strasse 1
61352 Bad Homburg v.d.H.
Germany
Tel: +49-8374-587-315
axel.beyer@deu.dupont.com

Asia

DuPont China Holding Co., Ltd.
Benny Lu
18th Floor, Shui On Plaza
Shanghai 200020, P.R.C.
China
Tel: +86-21-6386-6366 ext. 2419
benny-z.y.lu@chn.dupont.com

DuPont China Holding Co., Ltd.
Li Guang(L.G.) Fu
15th Floor, Shui On Plaza
333 Huai Hai Road(Central)
Shanghai 200021, China
Tel: +86-21-6386-6366 ext 2304
Li-Guang.Fu@chn.dupont.com

Americas

DuPont Packaging and Industrial Polymers
Stanley Merritt
4417 Lancaster Pike & Route 141
BMP 26/2270
Wilmington, DE 19805
USA
Tel: +1-302-992-5832
stanley.d.merritt@usa.dupont.com

photovoltaics.dupont.com

©2007 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, and The miracles of science™, Surlyn®, and Bynel® are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates.

Brand: Surlyn® and Bynel® trademarks may only be used under licensing agreement granted by DuPont for use on approved applications.

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentations. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual end-use conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement, H-51459 or H-50102-2.



The miracles of science™