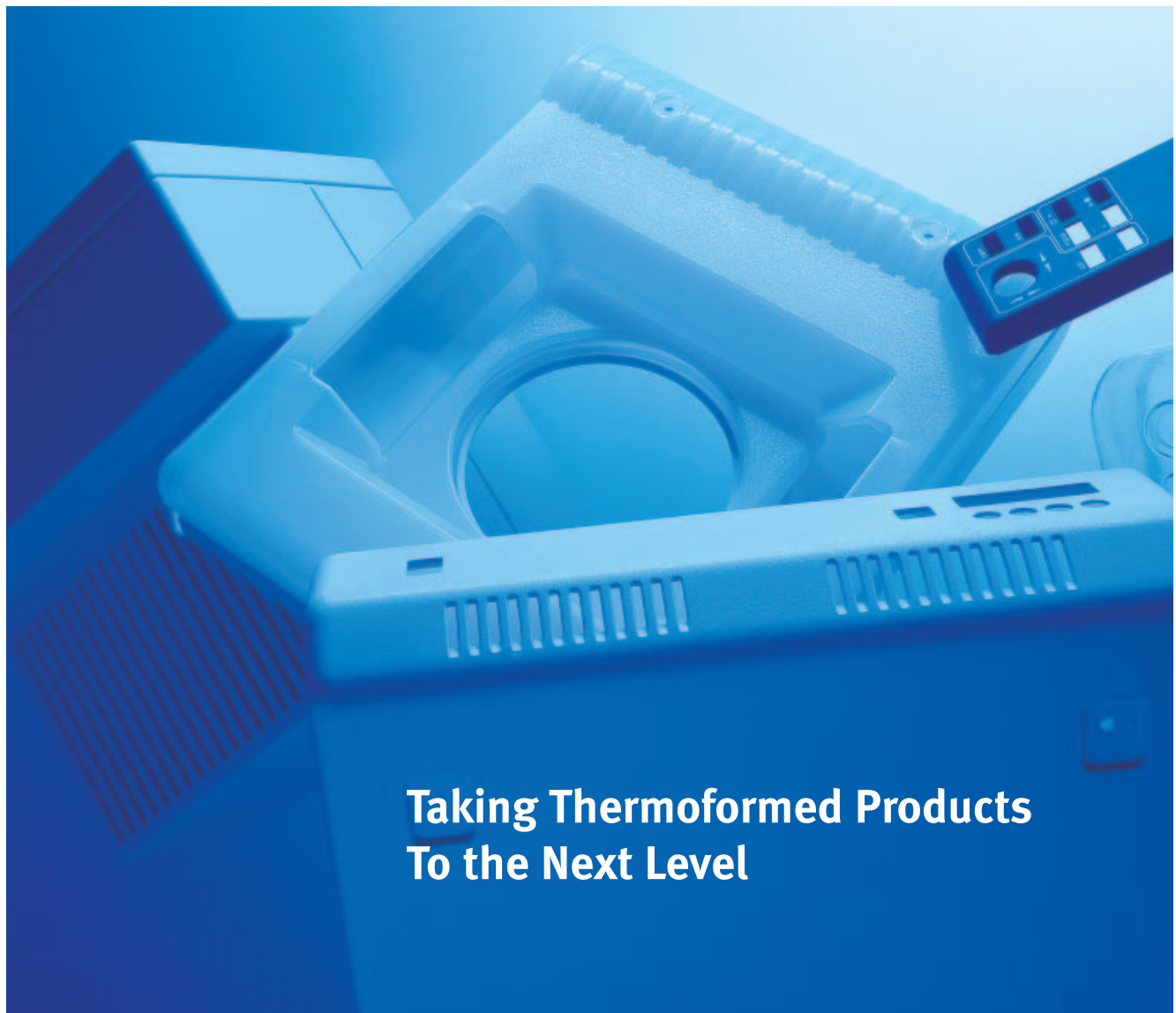




acetal resin

DuPont™ Delrin® Forming Solutions



**Taking Thermoformed Products
To the Next Level**

Photo, Adolf Illig Maschinenbau



The miracles of science™

Introducing DuPont™ Delrin® Forming Solutions...

- Get the superior performance of DuPont™ Delrin® acetal in thermoformed housings, panels and other products.
- Get the look you want with standard plastics decorating techniques – painting, printing, foil stamping and more.

Parts that do more

DuPont™ Delrin® Forming Solutions can make thermoformed components that perform well in many situations where ABS or polycarbonate fall short. They excel with excellent formability and unmatched performance capabilities.

- Resistance to more solvents and chemicals
- Increased scratch and scuff resistance
- Lower wear and friction
- Spring-like properties
- Better creep and fatigue resistance
- Excellent toughness, stiffness, strength

What to make of it

You can easily form equipment housings, trays, conveyor chutes, and a host of other parts from sheet made with Delrin® FS80, the world's first thermoformable acetal.

In components for biochemical research products, for example, the superior chemical and solvent resistance of Delrin® can make a difference in reliability and durability.

You can also gain benefits from Delrin® in thermoformed products such as automotive interior panels, major appliance components, shower stalls, furniture parts and components for winter sports equipment such as snowboards, skis or sleds.

Decorating for looks and functionality

When it comes to appearance and functional decoration, Delrin® Forming Solutions can do it all: glossy integral color, painting, printing, in-mold coating, foil stamping and more. For painted parts, complete coating systems are available with DuPont™ Delrin® Decorating Solutions.

Sheet readily available

In North America, thermoformable sheet and coil stock are available from Penn Fibre Plastics Inc., Bensalem, Pa. The company offers materials in a range of standard and custom colors.

Penn Fibre supplies coil stock ranging from 0.010 to 0.093 in. (0.25 to 2.4 mm) thick and up to 24 in. (610 mm) wide. Precut sheets are available in thicknesses from 0.030 to 0.250 in. (0.76 to 6.35 mm), in stock widths up to 48 in. (1220 mm), custom widths up to 1250 mm and in any length. For pricing, delivery and other information, call 1-800-662-7366 (215-702-9551) or visit www.pennfibre.com.

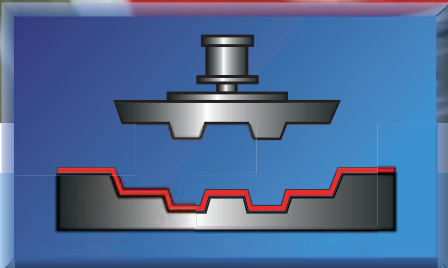
For sheet suppliers in other countries, contact your local DuPont representative.

Typical Properties of Delrin® FS80

Property*	Test Method	Units	Value
MECHANICAL			
Yield stress,	ISO 527-1/-2	MPa (kpsi)	44 (6.4)
Strain at break,	ISO 527-1/-2	%	>50
Yield strain, nominal	ISO 527-1/-2	%	40
Tensile modulus	ISO 527-1/-2	MPa (kpsi)	1800 (260)
Notched Izod impact	ISO 180/1A	kJ/m ²	18
THERMAL			
Deflection temperature, @ 1.80 MPa (264 psi)	ISO 75-1/-2	°C (°F)	73 (163)
Vicat softening temperature 50C/h, 10 N	ISO 306	°C (°F)	164 (327)
Melting temperature, 10°C/min	ISO 3146	°C (°F)	178 (352)
OTHER			
Melt mass-flow rate 190°C, 2.16 kg	ISO 1133	g/10 min	1
Density	ISO 1183	kg/m ³ (g/cm ³)	1250 (1.25)
Molding shrinkage, parallel	ISO 294-4	%	0.8

* Preliminary data. Test temperatures are 23°C unless otherwise indicated.

DuPont™ Delrin® Forming Solutions



Why Thermoforming?

Until now, the great performance of Delrin® acetal has only been available in injection molded parts and stock shapes.

Now DuPont™ Delrin® Forming Solutions extends the boundaries into more kinds of parts.

- Large parts are feasible, and economical.
- Tooling costs much less than an injection mold.
- Short production runs are economical, too.

Screen printing is just one of many decorating options. Decorating Supplies Inc. screen-printed sheet made from Delrin® FS80 and thermoformed these models of DuPont No. 24 Chevrolet driven by Jeff Gordon in NASCAR® racing.



Great formability

Sheet made from Delrin® FS80 performs well in standard thermoforming equipment. Porsche model cars shown demonstrate its deep draw capabilities. Measuring 5.5 in. (14 cm) high, they were thermoformed by Adolf Illig Maschinenbau, Heilbronn, Germany.

Let's go forward together

From concept to commercialization, DuPont can help you develop reliable, cost-saving components using DuPont™ Delrin® Forming Solutions. Please contact your local DuPont representative or the office for your country or global region.

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E-mail: enggpolymer@usa.dupont.com

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Caution: Do not use this product in medical applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement".

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