

Kelvx resin is a high temperature copolyester based resin for sheet products.

It is a proprietary technology developed by Eastman Chemical Company for use in outdoor environments.

It is a clear, tough, amorphous material with a temperature resistance equivalent to impact modified acrylic.

Kelvx Resin Key Values

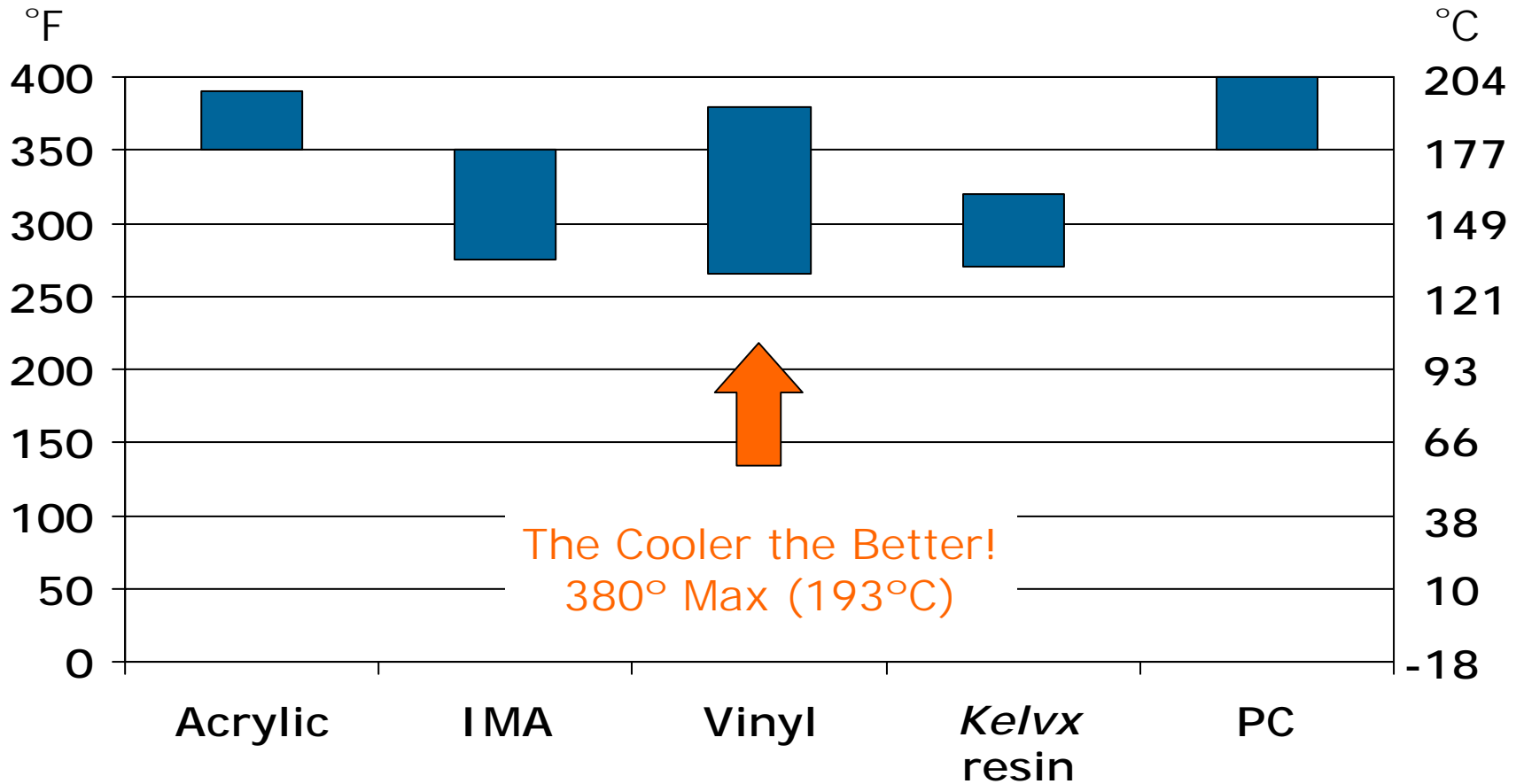
- Tougher than Impact Modified Acrylic
- No drying needed to thermoform
- Superior forming definition
- HDT of 84°C (183°F)
- Shorter forming cycle times than PC and IMA
- Excellent thermoforming with vinyl

Principal Physical Properties for Rigid Sign Plastic Sheet

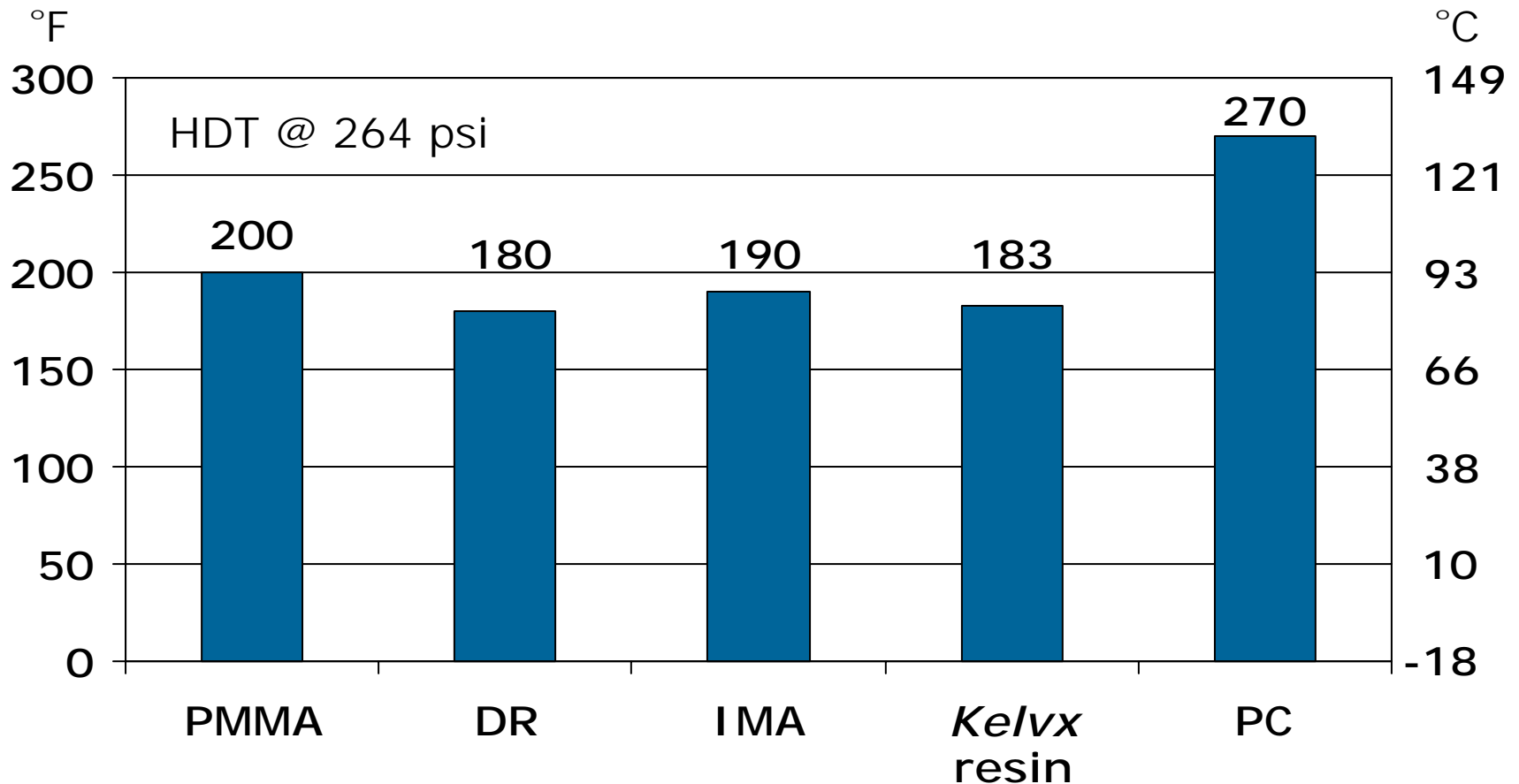
Impact Modified Acrylic or DR

<u>Properties</u>	<u>IMA (5)</u>	<u>IMA (7)</u>	<u>IMA (10)</u>	<u>PC</u>	<u>Kelvx resin</u>
Optical	Very Good	Very Good	Very Good	Very Good	Very Good
Weatherability	Very Good	Very Good	Very Good	Very Good	Very Good
Impact Resistance	Good	Good	Good	Superior	Excellent
Chemical Resistance	Fair	Fair	Good	Good	Excellent
Machining	Good	Good	Good	Excellent	Excellent
Scratch Resistance	Good	Fair	Fair	Fair	Fair
Heat Resistance	Excellent	Good	Fair	Superior	Excellent

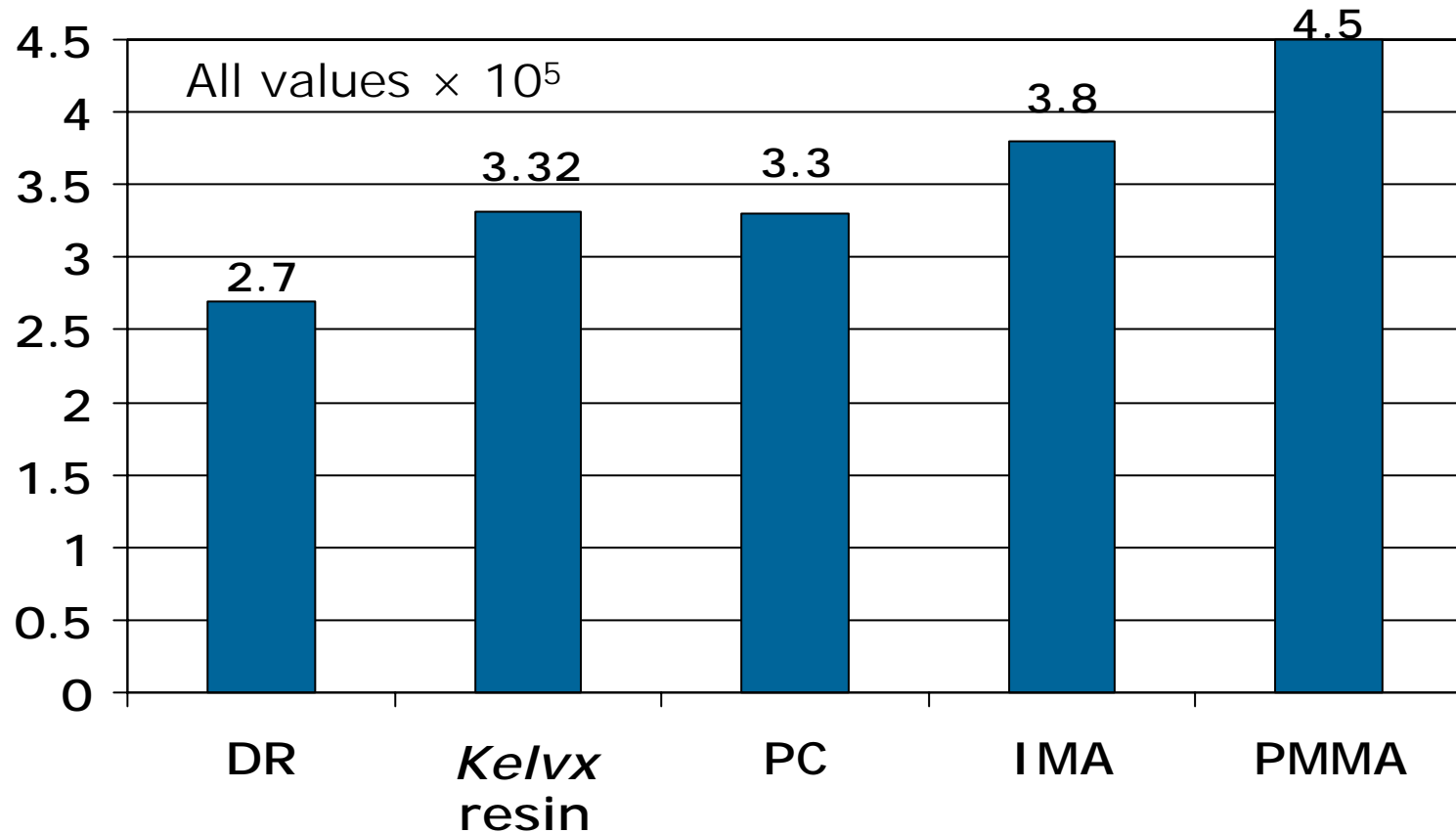
Forming Temperatures



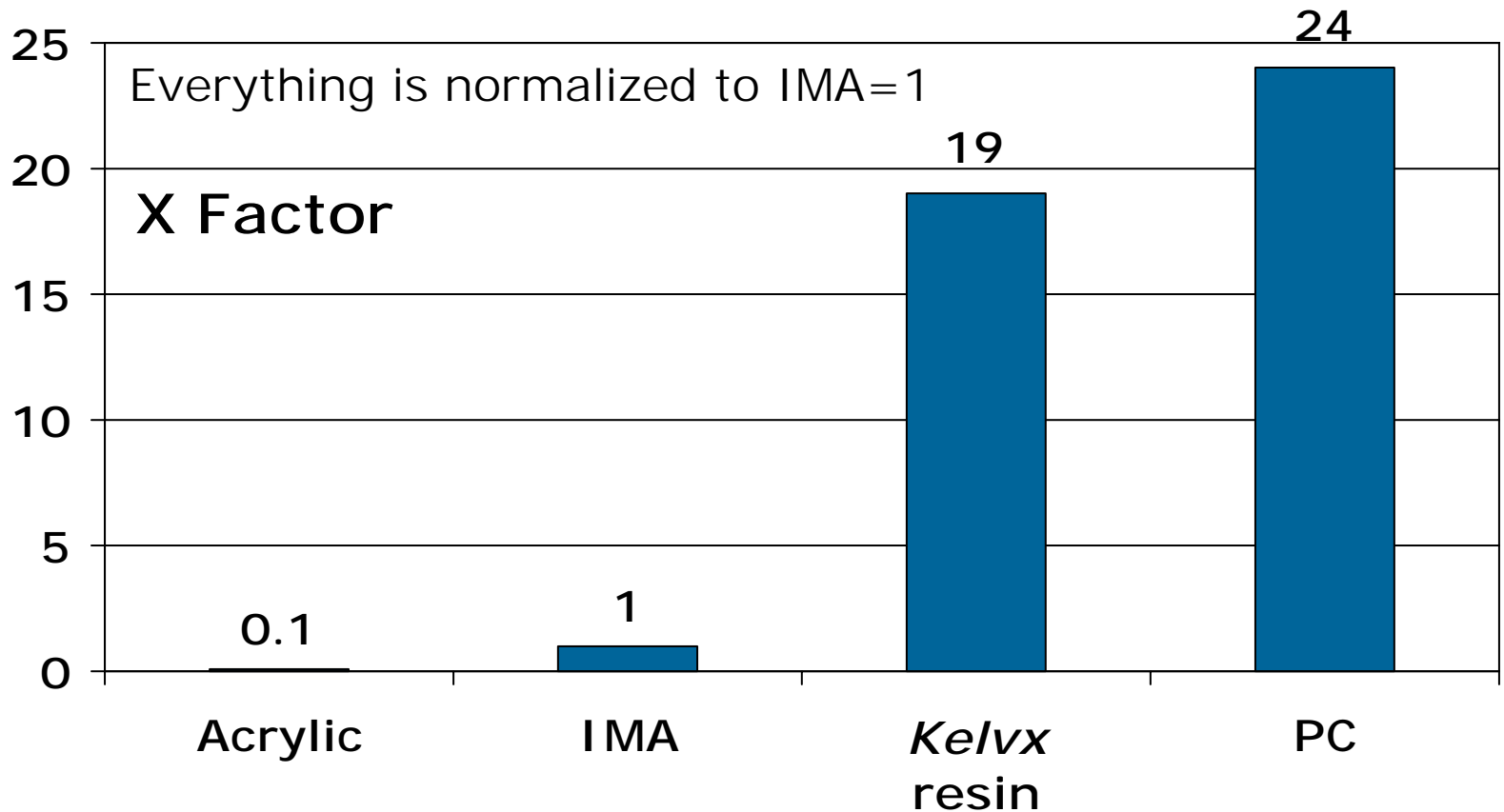
ASTM D684 Heat Deflection Temperature



ASTM D790 Flex Modulus



ASTM D3763 Instrumented Impact Total Energy in Ft/lbs



Actual ft/lbs

.20

2.5

46

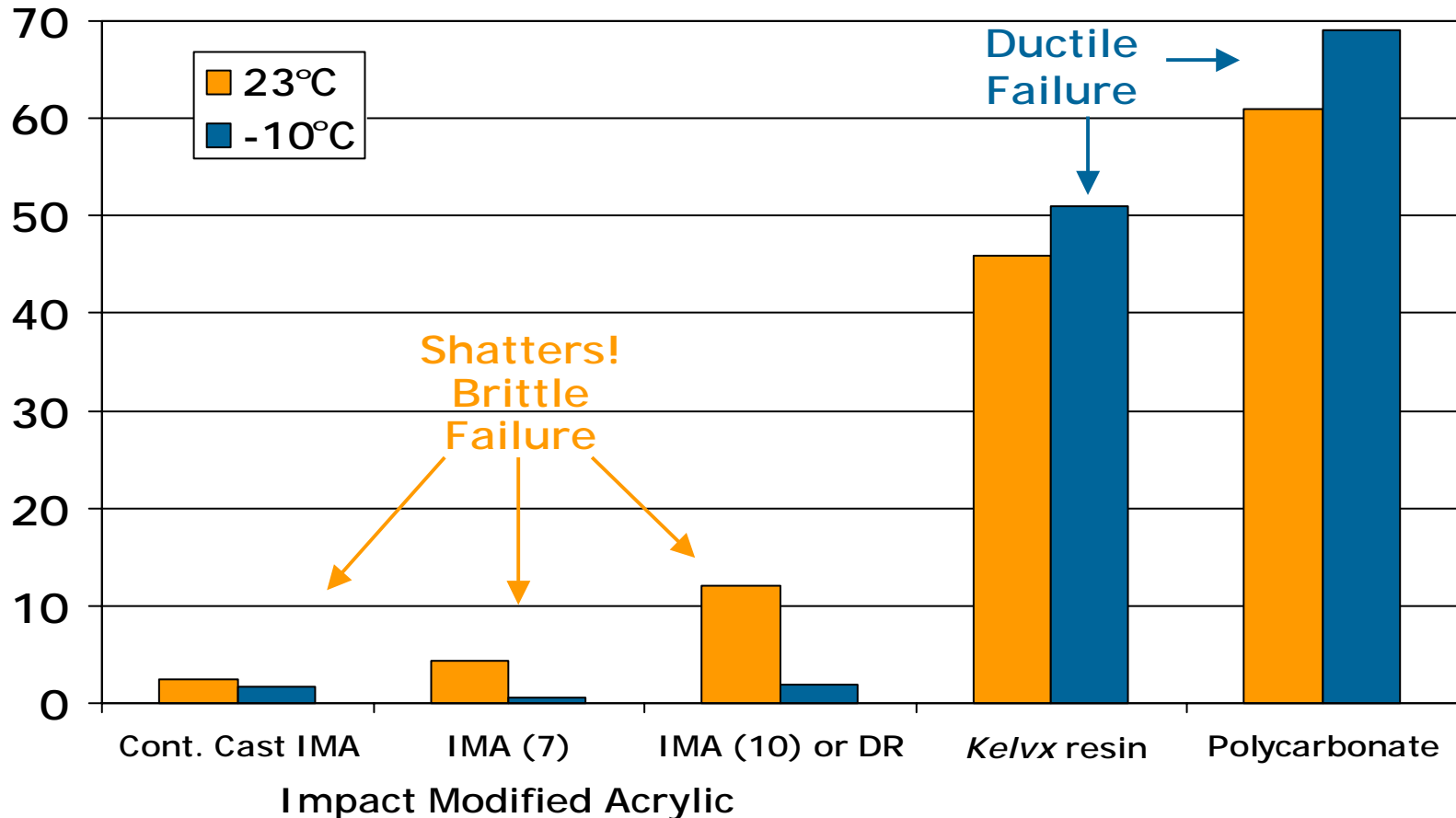
69

Comparative Impact Strength

ASTM D3763 Instrumented Impact Total Energy in Ft/lbs

<u>Product</u>	<u>23°C</u>	<u>-10°C</u>	<u>Failure</u>
Cont Cast IMA	2.5	1.7	Brittle (shatter)
IMA (7)	4.3	0.5	Brittle (shatter)
IMA (10) or DR	12.0	1.9	Brittle (shatter)
<i>Kelvx</i> resin	46.0	51.0	Ductile (puncture)
Polycarbonate	61.0	69.0	Ductile (puncture)

ASTM D3763 Instrumented Impact Total Energy in Ft/lbs



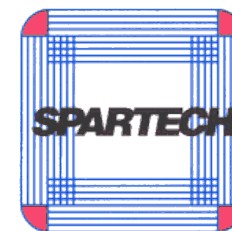
Sheet

Made with *Kelvx* Resin
is available from

Sheffield Plastics Inc.

A Bayer Company

Sheffield Plastics Inc.
119 Salisbury Road
Sheffield, MA 01257
Phone: 413-229-8711
800-628-5084
Fax: 413-229-8717



Spartech Plastics Inc.
2020 Greenwood Street
Evanston, IL 60201
Phone: 847-864-4050
Fax: 847-864-4689



Solarex[®] °K
High Heat Copolyester