# PC/ACRYLIC COMPOUNDS (RTP 1800A SERIES)

Alloyed Thermoplastics from RTP Company

# **Quick Information**

- Excellent Balance Of Impact Resistance, Processability, And Chemical Resistance
- Superior Impact Strength Compared To PC With The Processing Ease Of Acrylic
- Modifiable For Wear Resistance, Flame Retardance, Anti-Static, And Precolor

## Formulated For Injection Molding Or Extruded Sheet

Imagine a specialty compound based on a Polycarbonate (PC) and Acrylic alloy. One that can be processed at lower temperatures than PC, decreasing the cooling time and, in turn, the cycle time of the injection molding process. At RTP Company, we'll put our imagination to work to create an ideal PC/Acrylic compound for your application.

The synergistic effect of a PC/Acrylic alloy results in a compound that displays higher impact strength than PC while maintaining the processing ease associated with Acrylics. Better yet, pricing for PC / Acrylic Compounds are comparable to those made with PC/ABS, even though overall properties are similar or better.

RTP Company engineers can tailor your PC/Acrylic Compound to incorporate wear additives, flame retardants, and PermaStat® perma-

## World Headquarters:

RTP Company 580 East Front Street Winona, MN 55987 phone: 507-454-6900 800-433-4787 fax: 507-454-4629 web site: www.rtpcompany.com email: rtp@rtpcompany.com nently anti-static protection. The compound's natural opaque white provides excellent base for a wide range of colors. Compounds can also be overmolded with elastomers providing a "soft-touch" feel.

Key applications for PC/Acrylic Compounds include:

- Housings (e.g. hand held devices, fire alarms, lighted signs, appliances, security system control panels, and medical diagnostic devices)
- Computer components (e.g. PCI dividers and dummy SIMM fillers)
- Shutter actuator for printer toner cartridges (see story on back)
- Snow board bindings
- Existing PC or PC/ABS applications

PC/Acrylic Compounds from RTP Company...another innovation from the leader in specialty compounding.

Imagineering Plastics

The Leader in Specialty Compounding



### Manufacturing Facilities:



Winona, MN South Boston, VA Dayton, NV Beaune, France

Fort Worth, TX Indianapolis, IN Alloyed Thermoplastics from RTP Company

# PC/Acrylic Compounds Balance Performance and Processability

## Superior Impact Resistance

		Precolored			Flame Retardant		
		PC/ Acrylic	PC	PC/ ABS	PC/ Acrylic	PC	PC/ ABS
	ASTM Test	rtp 1800A	RTP 300	RTP 2500	rtp 1800a Fr	rtp 300 Fr	RTP 2500 FR
Impact Notched(ft-lbs/in)	D-256	30	18	10	16	13	8
Impact Unnotched(ft-lbs/in)	D-256	*	*	*	*	*	*
Tensile Strength(psi)	D-638	8,850	9,500	8,500	7,500	8,600	9,000
Tensile Modulus(x10 <sup>6</sup> psi)	D-638	0.35	0.35	0.40	0.32	0.33	0.40
Flexural Strength(psi)	D-790	12,500	13,500	13,500	12,000	12,500	14,000
Flexural Modulus(x10 <sup>6</sup> psi)	D-790	0.35	0.34	0.40	0.34	0.32	0.40
* No break							

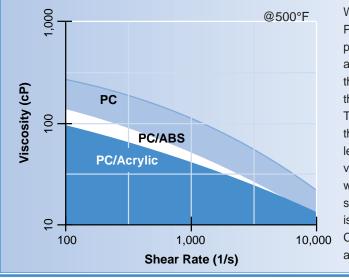


#### Shutter Actuator: PC/Acrylic Compound Combines Impact Strength and Processing Ease

At Lexmark, an RTP 1800A Series PC/Acrylic compound reduced both material and processing costs. The actuator holds open the shutter on a printer toner cartridge and must retain its dimensions and resist bending for long periods of time. Lexmark performs extensive drop testing and these parts have not failed a single drop test.

Full story: www.rtpcompany.com/info/apps

## Superior Processability



When injection molding PC/Acrylic compounds, processing conditions are 75-100°F cooler than those required for the processing of PC. This allows for greater throughput. The chart at left depicts viscosity versus shear rate, which displays the superior flow characteristics of RTP Company's PC /Acrylic alloy.

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## The Leader in Specialty Compounding

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