



» TECHNICAL BULLETIN

Edgetek™ ET8900 CR Series Chemically Resistant Thermoplastics Deliver Advanced Protection

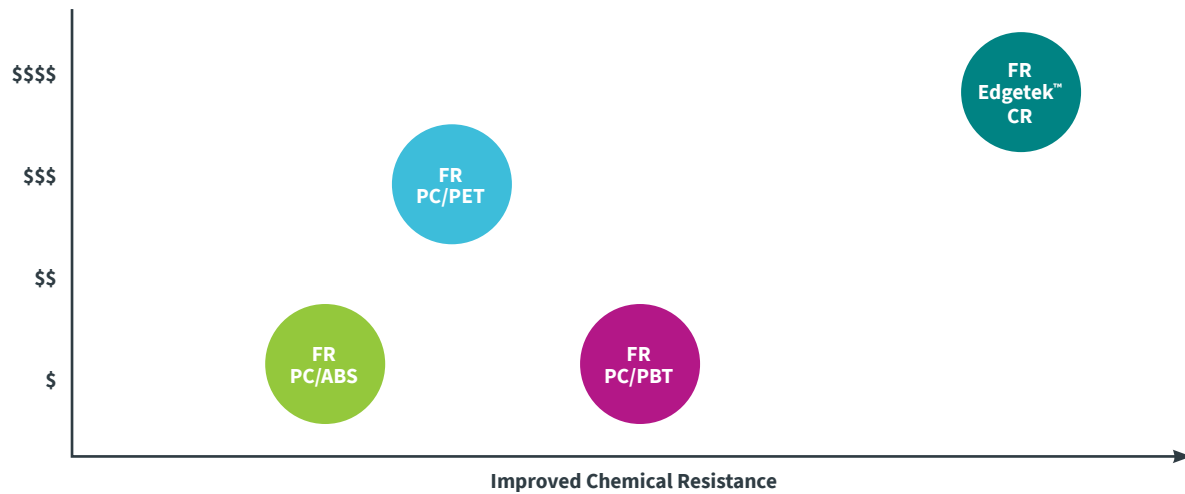
Today's increased disinfecting and cleaning protocols can lead to deterioration and reduce the useful product life for polymeric materials that lack proper chemical resistance properties. Whether you're designing for high-use, public devices or everyday home products that need to last longer, choosing the right material is more important than ever to minimize disinfectant-related failures, like cracking and crazing.

Developed to meet these challenges, Edgetek ET8900 CR thermoplastics show improved chemical resistance to common consumer disinfectants compared to PC/ABS, PC/PET and PC/PBT. Available in unfilled, impact-modified and flame-retardant grades, these formulations deliver comparable physical and mechanical performance to conventional PC blends.

With these high-performing properties, the Edgetek ET8900 CR materials are a fitting choice for high-touch applications, such as point-of-sale devices, that need to withstand frequent cleaning and disinfecting. In addition, these chemically resistant Edgetek materials are also suitable for routinely disinfected durable goods that flood the consumer space—toys, appliances, kiosks, ATMs, electronic housings, office supplies, gas pumps, charging stations, game controllers, and countless other products.



An independent, A2LA-accredited lab tested the following polymers with various disinfectants to help customers choose the material suitable for their specific application requirements.



MATERIAL COMPARISON WITH COMMON CONSUMER DISINFECTANTS

CRITERIA FOR RESISTANCE RATING

- + strength and elongation at yield retention between 90-110%
- + strength and elongation at yield retention between 75-125%
- + no statistically significant reduction in elongation at break ($p < 0.05$)
- + visual observation score of 4 or better (minor/no crazing, no cracks)
- + samples survived disinfectant exposure in strain jig

DISINFECTANT	EPA REG. NO.	ACTIVE INGREDIENTS	RESISTANCE RATING					
			Edgetek™ ET8900 CR	Edgetek™ ET8900 HI CR	Edgetek™ ET8920 FR CR	FR PC/ABS	FR PC/PET	FR PC/PBT
Clorox® Disinfecting Wipes	5813-79	Quaternary ammonium	++++	++++	++++	++	+++	++++
Formula 409® Heavy Duty Degreaser	N/A	Lauramine oxide, ethanolamine	++++	++++	++++	+	++	+++
Lyso® All-Purpose Cleaner	777-66	Quaternary ammonium	++++	++++	++++	+	+	++
			\$\$\$	\$\$\$	\$\$\$\$	\$	\$\$\$	\$

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