

Ignition Resistant PC/PET for Powered Devices in Harsh Environments

Equipment housings in industries ranging from electrical to medical to consumer electronics need to function in demanding environments. They need excellent chemical resistance to withstand aggressive cleaners and they also need ignition resistant properties to help ensure safety. EMERGE™ PC/PET 9500CR Advanced Resin from Trinseo is a blend containing polycarbonate (PC) and polyethylene terephthalate (PET). It balances a unique combination of advanced properties while maintaining the durability and pleasing aesthetic appearance that is needed.

Advantages and Benefits

Exceptional Chemical Resistance

The formulation of EMERGE™ PC/PET 9500CR Advanced Resin is specially designed for environments where it is necessary to endure repeated exposure to a wide variety of aggressive chemicals, including surface disinfectants and cleaners (see Table 1).

Ignition Resistance

EMERGE™ PC/PET 9500CR is an ignition-resistant material with UL ratings of V-1 at 1.5 mm, V-0 at 2.0 mm, and 5VA at 2.5 mm.⁽¹⁾

Excellent Toughness

High impact resistance and excellent heat resistance mean that EMERGE™ PC/PET 9500CR offers the durability required for day-to-day use in a variety of environments.

Attractive Appearance

EMERGE™ PC/PET 9500CR is available in custom colors. It can also be made available with different levels of high performance reinforcement for increased stiffness, while maintaining impact and aesthetic appeal.

Focused on Meeting Your Needs

The EMERGE™ Advanced Resins 9000CR Series was specifically designed for housings and other applications that require enhanced chemical resistance. EMERGE™ PC/PET 9500CR Advanced Resin is Trinseo's latest addition to this product family, meeting the needs for powered applications requiring ignition-resistant material performance.

Table 1: Resistance to Selected Cleaners/Disinfectants^(2,3)

Cleaner/Disinfectant	Retention of Ultimate Tensile Elongation		
	EMERGE™ PC/PET 9500CR	Competitive PC/ABS	Competitive PET
Wex-Cide 128	●●●	●	●●●
Virex ⁽³⁾ II 256	●●●	●	●●●
CaviCide ⁽⁵⁾	●●●	●	●
CIDEX PLUS ⁽⁶⁾	●●●	●	●●●
50% Bleach	●●●	●	●●●
70% IPA	●●●	●	●●●
Sani-Cloth ⁽⁷⁾ Plus	●●●	●	●●
Sani-Cloth ⁽⁷⁾ AF	●●●	●	●
Clorox Healthcare ⁽⁸⁾ Bleach Germicidal Wipe	●●●	●	●
Clorox Healthcare ⁽⁸⁾ Hydrogen Peroxide Cleaner Disinfectant Wipe	●	●	●
Virex ⁽⁴⁾ TB	●	●	●

Rating
 ●●● Excellent
 ●● Marginal
 ● Poor

Retention of Ultimate Tensile Elongation
 80 - 139%
 65 - 79%
 ≤64% or ≥140%

Committed to innovative solutions. In addition to EMERGE™ PC/PET 9500CR Advanced Resins, Trinseo offers a full portfolio of EMERGE™ Advanced Resins and STYRON™ Polystyrene Resins for equipment housings in a variety of application areas ranging from electrical to medical to consumer electronics. For more information, contact us at 1-855-TRINSEO (+1-855-874-6736) or visit us online at <http://www.trinseo.com>.

⁽¹⁾ Resins containing ignition-resistant additives do not readily support ignition. However, they will burn under the right conditions of heat and oxygen supply. The resins should not be exposed to direct flame or extreme heat. Results of small-scale flammability tests on these or any other materials are not to be considered indicative of the behavior of these materials under actual fire conditions. ⁽²⁾ Trinseo testing. Complete protocols and results available upon request. ⁽³⁾ Tested after 3 days exposure to chemicals under 1.0% strain. ⁽⁴⁾ Trademark of Diversey, Inc. ⁽⁵⁾ Trademark of Metrex Research Corporation. ⁽⁶⁾ Trademark of Johnson & Johnson. ⁽⁷⁾ Trademark of Professional Disposables International, Inc. ⁽⁸⁾ Trademark of The Clorox Company.



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