PREMIX
SHAPING THE WORLD OF COMPOSITES

Premi-Glas® 2143-24 CR-SX

Thick Molding Compound®

Technical Data Sheet

Typical Application — Electrical/Flame Retardant

Premi-Glas® 2143-24 CR-SX is a fiberglass reinforced thermoset Thick Molding Compound for electrical and flame retardant applications.

Key Features and Benefits:

- TMC compounding process preserves glass integrity for strength vs BMC.
- Non-Halogen FR technology for regulatory compliance.
- Pigmentable for molded-in color; best appearance with mold texture.
- Recognized by Underwriters Laboratories, File # E42524.
- Underwriters Laboratories 94-V0 flame resistance at 2.5mm thickness.

Typical Values. Mechanical values are for coupons compression molded to net shape.			
Properties	Test Method	Values (US)	Values (Metric)
Flexural Strength	ASTM D-790	20,500 psi	140 MPa
Flexural Modulus	ASTM D-790	1.5 x 106 psi	10 GPa
Tensile Strength	ASTM D-638	12,000 psi	82 MPa
Tensile Modulus	ASTM D-638	2.1 x 106 psi	15 GPa
Notched Izod	ASTM D 256	20 ft*lb/in	1,100 Joules/m
Unnotched Impact	ASTM D 4812	27 ft*lb/in	1,400 Joules/m
Comparative Tracking Index	ASTM D-2303	600	600
UL Relative Thermal Index (electrical)	UL 746C	266 deg F	130 deg C
UL Relative Thermal Index (mechanical)	UL 746C	266 deg F	130 deg C
UL Relative Thermal Index (impact)	UL 746C	266 deg F	130 deg C
Flame Resistance	U.L. 94 V0	Pass, 0.100 in	Pass, 2.5 mm
Dielectric Strength, KV/mm	ASTM D149	380 Volts/mil	15 kV/mm
Arc resistance, seconds	ASTM D495	180+ sec	180+ sec

This TMC product is generally intended to be injection or compression molded in matched metal die molds, typically at 300°F (150°C) and 500 to 1000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process. Nominal values for polymerization shrinkage (0.0015 to 0.002) and specific gravity (1.70 to 1.80) may be customized for individual applications. Contact your Premix sales representative for specific design recommendations.

Following physical characteristics are typical of this product:

CLTE, XY direction: 25 ppm/ deg C
CLTE, Z direction: 35 ppm/deg C
Thermal Conductivity: 0.3 W/m*deg K
Poisson's Ratio: 0.3