

QC-2150LD NT (126-40-50)

Engineered Structural Composite (ESC) Molding Compound

QC-2150LD NT is a fiberglass reinforced phenolic ESC molding compound. It exhibits outstanding low flammability characteristics. QC-2150 LD NT is recommended for applications such as aircraft interiors and public transportation components requiring composite materials having very low flammability, low smoke and minimal generation of toxic gases.

TYPICAL PROPERTIES -- UNCURED

Form	Roll, 18" wide, .070" thick	Glass Content	25%
Colors	Natural	Glass Length	1 inch
Shelf Life: @ 0°F	6 months	and 2 months @ 40°F	

TYPICAL PROPERTIES -- CURED

<u>Test</u>	<u>Procedure</u>	<u>Value</u>
Specific Gravity	ASTM D-792	1.25
Shrinkage, inch/inch (mm/mm)	ASTM D-570	0.0015 (0.0038)
Flexural Strength, psi (MPa) ¹	ASTM D-790	23,000 (158)
Flexural Modulus, psi (GPa) ¹	ASTM D-790	1.4 x10 ⁶ (9.6)
Tensile Strength, psi (MPa) ¹	ASTM D-638	11,000 (75)
Izod Impact, notched, ft.lb./in. (J/M)	ASTM D-256	8.6 (459)
<u>FST</u>		
<u>FAR/JAR 25.853 Amendment 25-116</u>	<u>Procedure</u>	
Flame Vertical Burn (60 sec)		0 seconds, 3.3 inches
Smoke Density Ds (FAA)	BSS7238	8
Toxicity of Gasses	BSS7239	Pass
	<u>Tested Thickness</u>	
OSU Heat Release KW / M ²	0.040"	38 (2 min), 63 (peak)

Since QC-2150LD NT does not contain an acid catalyst, the use of external mold release agents is not normally required once the mold is conditioned. The use of one or more breathe cycles is recommended to allow the water generated during the curing reaction to escape.

The carrier film may tend to cling to the SMC. It is easiest to remove using a quick stripping motion, or the sheet may be cooled slightly.

Precautions: For maximum shelf life, QC-2150LD NT must be stored cold. Storage for more than a few days at temperatures above 75°F may result in advancement of the material. QC-2150LD NT contains glass fibers and should be handled carefully in order to minimize skin contact. Molding areas should be well-ventilated to minimize exposure to fumes. Presses and pre-heaters must be provided with local exhaust to remove vapors from work areas. If adequate ventilation is not available, a respirator approved for removing organic vapor must be used.

WARRANTY -- The above information is offered for your consideration, investigation, and verification. No warranty, expressed or implied, is given, nor is freedom from any patents owned by Quantum Composites, Inc. or others implied. Final determination of the suitability of this material is the sole responsibility of the buyer. Contact our sales representative for assistance in developing procedures to fit individual requirements.

¹Tensile and Flexural Properties are determined using net shape molded specimens. Values obtained on cut specimens will typically be lower