

SWANCOR 2210-A/B

Epoxy Resin System for Pultrusion and Filament Winding



Product Description

SWANCOR 2210-A/B is a two component epoxy based resin system for pultrusion and filament winding application. This system combined low viscosity , high reactivity and good wet-out properties with glass fibers and carbon fibers. With proper controlled high temperature fabrication process (150~200°C), high Tg above 200°C (DSC Method) can be achieved.

Typical properties of liquid resin

Property	Unit	SWANCOR 2210-A	SWANCOR 2210-B
Appearance		Light yellowish Liquid	Light Brown Liquid
Viscosity @ 25°C	Cps	250~350	150~250
Mixed ratio(by wt).		A:B=100:150	
Mixed viscosity	Cps	220~320	
Density(g/cm ³)	%	1.10~1.20	1.15~1.25
Shelf life	year	1	1

Curing properties^{*1}

Property	Unit	Liquid Resin
Gel time @ 150°C	minutes	2.5~3.5
Gel time @ 180°C	seconds	40~60

^{*1}0.5g mixed resin on hot plate

Mechanical Properties of Resin Casting

Ingredients	Unit	Value	Rate
Tensile strength	MPa	50-60	ASTM D 638
Tensile modulus	GPa	2.1 - 2.3	ASTM D 638
Elongation at tensile strength	%	2.5 - 3.5	ASTM D 638
Flexural strength	MPa	100 - 110	ASTM D 790
Flexural modulus	GPa	2.1 - 2.3	ASTM D 790
Glass transition temperature	°C	180~200	(DSC 20°C/min)

Packing

SWANCOR 2210-A were packed in 5gallon barrel, weight 20kg per barrel. SWANCOR 2210-B were packed in 5 gallon barrel, weight 15kg per barrel.

MATERIAL SAFETY AND HANDLING INFORMATION

SKIN CONTACT:

Thoroughly wash exposed area with soap and water immediately. Remove contaminated clothing. Launder

The data presented herein are believed to be accurate and reliable. We require customers to inspect and test our product before use and to satisfy themselves as to contents and suitability for their specific applications. Information herein is to assist customers in determining whether our products are suitable for their applications but not to be taken as a guarantee, express warranty or implied warranty of merchantability or fitness for particular purpose, nor is any protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is limited to replacement of our material and in no event shall we be liable for special, incidental or consequential damages.

contaminated clothing before re-use.

EYE CONTACT:

Flush with large amount of water immediately and continuously for 20 minutes, lifting upper and lower lids occasionally. Get medical attention.

INGESTION:

Do not induce vomiting. Keep person warm, quiet and get medical attention. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

INHALATION:

If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention.

PERSONAL PROTECTION

Do not breathe vapors. Vapor explosion hazard, keep out of sewers. Eliminate all sources of ignition in Vicinity of spill or released Vapor to avoid fire or explosion. For large spills, warn public of downwind explosion hazard. Check area with explosion meter before reentering area. Ground and bond all containers and handling equipment.

RESIN STORAGE

Keep away from ignition sources; flames, pilot lights, electrical sparks, and sparking tools. NO SMOKING. Do not store in direct sunlight. To ensure maximum stability and maintain optimum resin properties, resins should be stored in closed containers at temperatures below 25°C (77°F).

SPILLS

Eliminate all ignition sources (flares, flames, including pilot lights electrical sparks). Persons not wearing protective equipment should be exclude from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent or other absorbent material and shoveled into containers.

WASTE DISPOSAL

Destroy by liquid incineration in accordance with applicable regulation. Contaminated absorbent should be disposed in accordance to government regulations.