

SWANCOR 2204-A/B

Epoxy Resin for Filament Winding and Transfer Molding



Product Description

SWANCOR 2204-A/B is designed for filament winding and transfer molding process and can be cured under ambient temperature and medium-high temperature which is composed of particular epoxy resin and hardener. It is suitable for manufacturing piping or tooling molding process application. Its main characters are low viscosity, long pot life under room temperature, short pot life under medium-high temperature, excellent mechanical property, high Tg, better wetting out property to glass fiber and carbon fiber.

Typical properties of liquid resin

Property	SWANCOR 2204-A	SWANCOR 2204-B
Appearance	Transparent clear liquid	Light yellow clear liquid
Viscosity @25°C (cps)	900~1,400	5~20
Density@25°C (g/cm ³)	1.1~1.2	0.9~1.0
Flash point (°C)	>100	>90
A/B ratio(weight)	100:25	
Initial Mix Viscosity@25°C (cps)	350~450	
Peak Time 25°C /100g (mins)	140~220	

Typical clear casting properties of cured resin*¹

Property	SI Standard	US Standard	Test Method
Tensile Strength	75~95 MPa	10,870~13,800 psi	(ASTM D 638 or ISO 527)
Tensile Modulus	3.30~3.65 GPa	4.78~5.29X 10 ⁵ psi	(ASTM D 638 or ISO 527)
Tensile Elongation	>3.5 %	>3.5 %	(ASTM D 638 or ISO 527)
Flexural Strength	150~185 MPa	21,700~26,800 psi	(ASTM D 790 or ISO 178)
Flexural Modulus	3.6~4.0GPa	5.22~5.80 X 10 ⁵ psi	(ASTM D 790 or ISO 178)
Tg	110~130°C	230~266°F	(DSC test, 10 °C /min)

*¹Curing condition:4 hours at room temperature + Post Cure at 110°C for 0.5 hours.

Packing , Storage and handling precaution

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.

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1. **SWANCOR 2204-A** packed in 55 gallon barrel, weight 200kg per barrel and packed in 5 gallon barrel, weight 20kg per barrel.
2. **SWANCOR 2204-B** packed in 55 gallon barrel, weight 180kg per barrel and packed in 2.5 gallon barrel, weight 5.0kg per barrel.
3. **SWANCOR 2204-A and SWANCOR 2204-B** should be stored in shady and dry environment at temperature below 35°C (95°F) to have maximum shelf life up to 12 months.
4. The epoxy and hardener have to well mix by regular proportion for use.
5. After epoxy and hardener are mixed, it should be used in valid period to avoid gelling and can't be used.
6. All implement for daubing and stowing should be cleansed right after used.
7. Under construction duration, should avoid skin contact, wear protective cloth and glove if necessary.
8. Crystallization will not occur above 15°C (59°F), if encounter, it can be undone by careful heating.

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