

## Product Description

**SWANCOR 901-200** is a low viscosity Bisphenol A type epoxy vinyl ester resin. It provides excellent corrosion resistance to a broad range of organic and inorganic acids, alkalis, oxidizing chemicals and salt solutions etc. It also provides very good mechanical strength such as tensile and flexural while incorporated with reinforcement such glass fiber, carbon fiber etc. **SWANCOR 901-200** is designed to provide superior toughness with excellent fatigue resistance due to high heat distortion temperature.

## Applications

- ◆ Chemical storage tanks, pipes, flue gas desulfurization systems (FGD), scrubbers, ducts.
- ◆ Corrosion resistant flooring while incorporated with aggregates.
- ◆ Waste water treatment systems.
- ◆ Food storage tanks and pure water system.

## Fabrication Methods

- ◆ Can be easily applied by hand lay-up laminating, spray-up, pultrusion, resin transfer molding (RTM) and filament winding.
- ◆ Can be used in polymer concrete casting.

## Typical properties of liquid resin

Property	SWANCOR 901-200	SWANCOR 901-200P	SWANCOR 901-200T	SWANCOR 901-200TP
Appearance	Clear Amber Liquid	Purple liquid	Turbid liquid	Purple turbid liquid
Solid Content (%)	54~56	---	---	---
Viscosity (cps) <sup>*1</sup>	150~250	150~250	250~450	250~450
Gel Time (min) <sup>*2</sup>	15~25 <sup>*2</sup>	15~25 <sup>*3</sup>	15~25 <sup>*2</sup>	15~25 <sup>*3</sup>
Shelf Life (months/25°C)	6	3	3	3

\*1 LVT-#3-60rpm , 25°C

\*2 55%MEKP: 1.2%, 6% Co: 0.4%, 100%DMA: 0.05%, 25°C

\*3 ≤10°C, 55%MEKP: 3.0%; 11-19°C, 55%MEKP: 1.5%; ≥20°C, 55%MEKP: 1.2%

## Typical clear casting properties of cured resin<sup>\*3</sup>

Property	SI	US Standard	Test Method
Tensile Strength	76~90MPa	11,000~14,000psi	ASTM D638
Tensile Modulus	2.9~3.5GPa	4.8~5.0 x 10 <sup>5</sup> psi	ASTM D638
Breaking Elongation	4.5-5.5%	4.5-5.5%	ASTM D638
Flexural Strength	110~135MPa	17,000~20,000psi	ASTM D790
Flexural Modulus	3.1~3.5GPa	4.5~4.9 x 10 <sup>5</sup> psi	ASTM D790
Heat Distortion Temperature	100~102°C	215~221°F	ASTM D648
Barcol Hardness	30~38	30~38	ASTM D2583

\*3 Cure condition: 24 hours at room temperature then 2 hours at 105°C.

## NOTICE IN USE

1. The gel time of **SWANCOR 901-200** is affected primarily by catalyst concentration and temperature. The variations of cure characteristics may be caused by the variations of catalyst, humidity, pigment, fillers and

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other additives. It is recommended that the fabricators check the cure characteristics with a small quantity resin before proceeding for bulk production.

2. **SWANCOR 901-200** contains organic solvent (styrene). Keep away from heat, sparks and flames.
3. **SWANCOR 901-200** is a potentially reactive chemical. Please store it in dark and keep away from heat and direct sunshine.
4. Containers, not completely emptied must be closed immediately after use.

## **MATERIAL SAFETY AND HANDLING INFORMATION**

### **SKIN CONTACT :**

Thoroughly wash exposed area with soap and water immediately. Remove contaminated clothing. Launder 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. High concentration of vapor can be hazardous. 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 re-entering 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. Store separate from oxidizing materials, peroxides, and metal salts. Keep container closed when not in use. To ensure maximum stability and maintain optimum resin properties, resins should be stored in closed containers at temperatures below 25°C(77°F). Copper or copper containing alloys should be avoided as containers.

### **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.

### **PACKAGE :**

Standard packing is 200 kg steel drum.

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