

TECHNICAL DATA SHEET



SHOWA DENKO K.K.

13-9, Shiba Daimon 1-chome
Minato-ku, TOKYO, 105-8518, Japan
TEL: +81-3-5403-5600
FAX: +81-3-5403-5720

Brominated type Vinyl ester resin

Ripoxy™ S-510EX

Characteristics

- Excellent flame resistance.
- Excellent Chemical Resistance.
- Class 1 relevel (for ASTM E-84)

Advantages

- Lower viscosity : can use smoothly

Applications

- Chemical tanks, pipes, scrubbers, ducts

1. properties of liquid resin

Property	Unit	S-510EX	Test method
Appearance	-	Clear	-
Viscosity	dPa·s/ 25°C	3.0 - 5.0	ASTM D445
Gel time	Min	20.0 - 40.0	
Shelf life	Months/25°C	3	

*Gel time: 25 °C 55% MEKPO 1.0phr Promoter EX 0.5phr

*Promoter EX : Cobalt naphthenate (metal 6%) / Dimethylaniline =60phr/40phr

3. Properties of cured resin

Property	Unit	Cast	Laminate	Test method
Flexural strength	MPa	105	187	ASTM D790
Flexural modulus	GPa	3.6	7.9	ASTM D790
Tensile strength	MPa	45	106	ASTM D638
Tensile elongation	%	1.5	2.0	ASTM D638
Heat distortion temperature	deg.C	135	-	ASTM D648
Barcol Hardness	-	42	50	ASTM D2583
Curing shrinkage	%	6.8	-	ASTM D2566
Glass transition point (Tg)	deg.C	140	-	TMA method
Oxygen index	%	35		

*Laminated constitution: 3mats(450g/m²), glass contents 30%

Precautions for Handling

1. Industrial safety and health precautions

- Styrene contained, if inhaled, it could cause organic solvent poisoning and other health damages.
- When using Ripoxy, secure proper ventilation and wear anti-organic gas mask or air-supplied respirator and proper protective clothes to prevent contact with the body.

2. Storage and handling precautions

- Ripoxy is a flammable liquid in Class 3 under the United Nation Law
- Handling should be made away from heat or fire, and storage must conform

3. Precautions in use

- When using curing agent and promoter, first stir the promoter well and then add the curing agent (Simultaneous addition must be made because it would cause explosive decomposition)

4. First aid

- When Ripoxy gets into the eyes, wash away with abundant water for at least 15 minutes, and see the doctor if there is pain or change in appearance.

5. Disposal precautions

- Dispose after the content is completely used up.
- Any surplus resin containing curing agent and/or promoter must be cured in a water bath. (If disposed before curing, the curing exothermicity could trigger spontaneous combustion.)

6. Other precautions

- For detailed information on the safe handling of Ripoxy, please make sure to read before use the separately prepared 'Safety Data Sheet'.

The information presented herein, while not guaranteed, is true and accurate to the best of our knowledge. However, no warranty or guarantee is made regarding the performance or stability of any product since the manner of use and condition of storage and handling are beyond our control.