

MERICAN 3314 A/B is a two-component, halogen-free flame retardant epoxy resin composed of epoxy resin and amine curing agent, which has the advantages of low viscosity, fast defoaming, fast curing speed at medium temperature, high mechanical properties, excellent heat resistance, and good wet-out to fibers.

# **FEATURES**

- Flammability rating is UL94-V0
- Flame retardant grade of glass fiber composite material passes DIN5510-2 S4
- Good resistance to oil corrosion

### **APPLICATIONS**

- Suitable for the liquid molding of flame-retardant composites
- Suitable for automotive parts

# TYPICAL PRODUCT VALUES

Property <sup>(1)</sup>	MERICAN 3314 A	MERICAN 3314 B
Appearance	Light yellow	Colorless
	liquid	transparent liquid
Viscosity, cps (25 °C)	400 - 600	15 - 50
Density, g/cm³ (25 °C)	1.1 - 1.2	0.92 - 0.99
Amine Value, mg KOH/g	-	750 - 850
Epoxy Equivalent, g/mol	200 - 300	-

# **PROCESS PARAMETERS**

It must be configured accordance with the instructions strictly, reduce or increase the addition of curing agent will not slow down or speed up its reaction. The resin and hardener must be completely mixed.

Property <sup>(1)</sup>	MERICAN 3314 AB
Recommended Mass Ratio	100: 20 ± 2
Mixed Viscosity, cps (25 °C)	140 - 240
Pot Life, min (25 °C)	60 - 90

Property (1)	MERICAN 3314 AB	ТМ
Tg, °C	100 - 110	ASTM D3418
Tensile Strength, MPa	70 - 80	ASTM D638

# MERICAN® 3314 A/B

Tensile Modulus, GPa	2.8 - 3.0	ASTM D638
Elongation at Break, %	3.0 - 5.0	ASTM D638
Flexural Strength, MPa	110 - 130	ASTM D790
Flexural Modulus, GPa	2.8 - 3.0	ASTM D790
<b>Curing Conditions</b>	80 °C / 1 h + 120 °C / 2 h	

- (1) Typical values only, should not be considered as product specifications.
- (2) Hot plate.

# **TESTING CONDITIONS**

Temperature: 25 °C. Relative moisture: 50 ± 5 %.

# **PACKING AND STORAGE**

Net weight 20 Kg / iron drum, 200 Kg / iron drum, 1000 Kg / IBC tank. The storage container should be well sealed, and the environment should be cool, dry and ventilated due to the hygroscopicity of epoxy resin. The initiator and accelerator must avoid to direct sunlight, the two should be strictly separated and not be stored in the same warehouse or the same carriage for transportation.

#### **MATERIAL SAFETY**

A Material Safety Data Sheet of this product is available on request.

#### **TEST METHODS**

Test methods (TM) referred to in the table(s) are available on request.

SINO POLYMER is a leading manufacturer of epoxy vinyl ester resin, unsaturated polyester, epoxy resin, polysulphone, coating and adhesives since year 1958, with its headquarter and plant located in Shanghai Chemical Industry Park, P.R. China. The company's Total Quality Management Gene's guaranty sustainable product & service quality, lead time and competitiveness, as the Safety & Security Management, Improvement Process, R&D and International developments make Sino Polymer a sustainable partner on long term.

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