



MERICAN 3881 A/B is a two-component, high-performance epoxy resin system composed of epoxy resin and anhydride curing agent. It has the advantages of low viscosity, long pot time and good process performance, it is suitable for pultrusion, filament winding process.

FEATURES

- ◆ Fast curing at medium temperature
- ◆ Good wet-out to fiber
- ◆ High heat resistance
- ◆ Good process, thermal and mechanical properties

APPLICATIONS

- ◆ Suitable for the manufacture of pultruded pipes, rods and other profiles of various cross-sectional shapes and sizes, such as cable cores
- ◆ Suitable for the high temperature and high pressure resistant pipes

TYPICAL PRODUCT VALUES

Property ⁽¹⁾	MERICAN 3881 A	MERICAN 3881 B
Appearance	Brown liquid	Yellow-brown transparent liquid
Viscosity, cps (25 °C)	15000 - 25000	27 - 430
Density, g/cm ³ (25 °C)	1.1 - 1.2	1.1 - 1.2
Acid Value, mg KOH/g	-	550 - 610
Epoxy Equivalent, g/mol	125 - 145	-
Shelf Life (10 °C, sealed)	6 months	12 months

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 ⁽¹⁾	MERICAN 3881 AB
Recommended Mass Ratio	100: 124
Mixed Viscosity, cps (25 °C)	1300 - 2500
Mixed Density, g/cm ³ (25 °C)	1.0 - 1.2
Gel Time ⁽²⁾ , sec (120 °C)	550 - 650
Gel Time ⁽²⁾ , sec (150 °C)	60 - 90

Property ⁽¹⁾	MERICAN 3881 AB	TM
-------------------------	-----------------	----

MERICAN® 3881 A/B

Tg, °C	195 - 205	ASTM D3418
Tensile Strength, MPa	65 - 75	ASTM D638
Tensile Modulus, GPa	2.8 - 3.0	ASTM D638
Elongation at Break, %	3.0 - 4.0	ASTM D638
Flexural Strength, MPa	120 - 130	ASTM D790
Flexural Modulus, GPa	2.8 - 3.0	ASTM D790
Curing Conditions	100 °C / 1 h + 150 °C / 1 h + 200 °C / 1 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.

SINO POLYMER CO., LTD.

NO. 130, Muhua Road, Shanghai Chemical Industry Park, 201507
Shanghai, China

Phone: +86 21 64252619

Email: huachang@hchp.com.cn