SDF1210A/83-8B Epoxy Resin
Technical datasheet

Description & Application

SDF1210A/83-8B is a solvent-free liquid epoxy resin and curing agent. It can be cured at room temperature or under the customer's own conditions. After curing, the surface has excellent color and high temperature resistance (120-130 °C) without cracking. This product is suitable for high temperature bonding and potting of ceramics, golf clubs, Electric motor, high power transformers, snowboards, and quartz. And suitable for for carbon fiber and glass fiber winding, pultrusion, lamination, prepreg process forming composite products. It has the characteristics of waterproof and UV protection.

Product data

	SDF1210A	SDF83-8B	Mixed
Appearance	*Transparent*	*light yellow*	
Specific gravity	*1.16*	*0.99*	
Viscosity at 25°C (Pa.s)	*20.000-30.000*	*6.000-8.000*	
Mixing Ratio (weight)	*100*	*100*	
Pot life at 25°C (100gr)			*30min*
Curing Conditions (2gr)			*4-6h at* 25°C

Processing

Working environment: Please keep the plastic container clean. A, B components are strictly according to the weight ratio, accurately weighed, and stir it evenly along the inner wall of the container clockwise until it is used for 3-5 minutes.
According to the operating time and amount of glue deployment, to avoid waste.
When the temperature is lower than 15 °C, please pre-heat the A glue to 30 °C and then adjust the rubber, easy to operate (low temperature, A glue will thicken); After use must seal the lid, to avoid the product due to moisture absorption scrapped.
When the relative humidity is more than 85%, the surface of the cured product can easily absorb the moisture in the air to form a white mist. Therefore, when the relative humidity is more than 85%, it is not suitable for room temperature curing. It is recommended to use the heating and curing.
The lid must be sealed after use to avoid the product being scrapped due to moisture absorption.

Typical cured properties

Hardness	*Shore D*	*80*
Withstand voltage	*KV/mm*	*22*
Tensile strength	*Kg/mm2*	*≥25*
Volume resistance	*Ohm3*	*1x10*15*
Surface resistance	*Ohmm2*	*5x10*15*
Long-term temp resistance	*℃*	*120-130*
Temperature resistance range	*℃*	*220-230*
Shrinkage	*%*	*<0.5*
Compressive strength	*Kg/mm2*	*11.3*

The above performance data are typical data measured in a laboratory environment with a temperature of 25 ° C and a humidity of 70%, and are for customer reference only.

Recommended Surfaces

Metal	Al, Mg, Stainless Steel, CRS
Plastic	ABS, PC, PVC, Acrylics
FRP	VE, DCPD modified Polyester, Epoxy

Lap Shear Strength

ABS (SF)	*6.2 mPa*	*ASTM D 1002 23°C*
PCc (SF, CF)	*10.1 mPa*	*ASTM D 1002 23°C*
Aluminum 6061d (CF)	*21.5 mPa*	*ASTM D 1002 23°C*
Aluminum 6061d (CF)	*9.8 mPa*	*ASTM D 1002 82°C*
Aluminum l 6061d (CF)	*86.7 N/10mm*	*ASTM D 1876 23°C*

Chemical resistance

Hydrocarbons
Acids and bases (3-10 pH)
Saline solutions are not resistant to:
Polar solvents
Strong acids and bases

Cleaning

Wipe surface with solvent to clean all heavy oils, or use industrial cleaning equipment. In the range of 1-35°C, manual and pneumatic glue guns can be used for dispensing, and the needle and the substrate are at a 45° angle.
For uncured products, alcohol cleaning can be used. Once the product is cured, it can only be removed by mechanical cleaning.

Storage

Store this product in a cool, dry, ventilated environment away from heat sources. Optimum storage temperature is 10 °C and 32 °C. Do not return unused product to original container.