

ERA-144
FAST CURE, THIXOTROPIC EPOXY ADHESIVE

ERA-144 is an easy to use, thixotropic, high strength, fast curing room temperature epoxy adhesive. It has a convenient 1:1 by weight or volume mix ratio which lends itself to both production and field applications. When mixed and ready to use the adhesive is easily spreadable with a trowel or spatula and it will stay in place. Typical applications are the bonding of sandwich panels, metals, ceramics, hardboard, foamglass, carbides, glass, masonry and many plastics. It serves as a general purpose adhesive in the electrical/electronics industry.

TYPICAL HANDLING PROPERTIES:

Resin	ERA-144A
Hardener	ERA-144B
Mix ratio by weight, phr	100
Mixed Viscosity at 25°C, cp	Paste
Pot Life at 25°C (100 grams), mins	15
Recommended Cure Schedule	24 hrs at 25°C
Alternate Cure Schedule	Gel at RT + 2 hrs at 70°C

TYPICAL CURED PROPERTIES AFTER RECOMMENDED CURE SCHEDULE:

Color	Translucent
Specific Gravity	1.1
Hardness, Shore D	65
Lap Shear Strength to Aluminum, psi	
at -55°C	2250
at 25°C	2250
at 95°C	150
Service Temperature range	-55°C to 90°C
Glass Transition Temperature, °C	40
Dielectric Strength, volts/mil	600
Dielectric Constant at 1 kHz and 25°C	3.2
Dissipation Factor at 1 kHz and 25°C	0.03
Volume Resistivity at 25°C ohm-cm	1x10 ¹⁵

INSTRUCTIONS FOR USE:

At room temperature, mix 100 grams of ERA-144A with 100 grams of ERA-144B and vacuum degas. Cure as recommended to achieve the desired properties. Typical cured properties were determined using the recommended cure schedule. Some difference in properties may occur with the alternate or other cure schedules.

FOR INDUSTRIAL USE ONLY:

These materials are intended for industrial use only, and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

WARNING!!

Although the system contains low volatility materials, care should be taken in handling. Adequate ventilation of the work place and ovens is essential. These materials may cause injury to the skin following prolonged or repeated contact and dermatitis in susceptible individuals. In case of skin contact, wash thoroughly with soap and water. For eyes, flush immediately with plenty of water for at least 10 minutes and seek medical attention. Refer to the Material Safety Data Sheet for additional health and safety information.

SHELF LIFE:

The shelf life of these materials is greater than two years when stored in unopened containers at an average temperature of 25°C.