



TECHNICAL DATA SHEET

TDS# 1482A

DATE: JUNE 2013

BACON INDUSTRIES

INSTRUMENT GRADE POTTING COMPOUND P-182A

Potting Compound P-182A is a highly filled high performance epoxy system featuring relatively low viscosity along with very low shrinkage stress, low coefficient of thermal expansion, high strength, high modulus of elasticity and excellent thermal shock resistance. This material is useful in applications requiring high dimensional stability and for low outgassing in end uses such as gyro motor stators, electromagnetic devices and precision electronic devices operating in extreme environments.

RECOMMENDED MIXING AND HANDLING PARAMETERS

Resin	P-182A
Activator	BA-182
Parts by weight of activator required per hundred of resin	8.0
Work life at 160°F, minutes	50
Recommended Cure, hr/°F	3/160 + 16/212

TYPICAL PROPERTIES OF CURED ADHESIVE:

Extrusion rate at 75°F and 60 psi (5cc syringe type 5SAKP1), grams/minutes	14.2
Pot Life at 160°F, minutes	35
Color	Black
Specific Gravity	1.79
Hardness, Shore D	90
Lap Shear Strength to aluminum, psi	
at 75°F	2250
at 200°F	1790
at 300°F	850
at 400°F	495
Coefficient of Linear Thermal Expansion (TMA), 10 ⁻⁶ /°F from 77°F to 212°F	12.0
Glass Transition temperature (DSC), °F	271

(over)

INSTRUCTIONS FOR USE:

For details of recommended equipment and technique, see Data Sheets No. 1021, 1031, and 1041.

Loosen the cover on the can of Compound 182A and heat in an oven to 160°F to 250°F. Mix the contents thoroughly each time before removing material. Place 100 parts by weight of compound into a glass or metal container and place 8.0 parts by weight of Activator BA-182 into a container sealed with a screw cap. Heat each container and contents to the potting temperature, 135°F or 160°F as selected. Add the activator to the compound and mix well with a mechanical stirrer for five minutes while maintaining the temperature of the mixed compound. Vacuum degas for five minutes while maintaining temperature and proceed with the molding. Cure as indicated. For best stress relief, remove from the mold prior to the oven post-cure.

FOR INDUSTRIAL USE ONLY! DANGER!

These materials, including vapors, may cause injury to the skin following prolonged or repeated contact. Use with adequate ventilation. Activator BA-182 is a caustic amine which can cause eye injury and skin burns. In case of contact, flush immediately with plenty of water. For eyes, seek medical attention at once. For health and safety information, refer to the Material Safety Data Sheets for these materials.

SHELF LIFE:

The shelf life of these materials is greater than two years when stored in unopened containers at an average temperature below 85°F.