

KOFORD

ENGINEERING, LLC

EPOXY STRUCTURAL ADHESIVE E-111

E-111 is a high performance aluminum filled single component modified epoxy adhesive which can be cured at 125°C or 140°C to provide exceptional shear strength in combination with high peel strength, impact resistance, and good temperature resistance. Especially suitable for applications for bonding magnets and other applications where dissimilar materials are bonded. Offers much higher hot bond strength and long term durability than modified acrylic adhesives or conventional epoxies. Has good adhesion to plastics as well as metal and ceramics. Due to the aluminum filler the minimum bondline gap is approximately .002” to .003”.

PROPERTIES

appearance.....	grey viscous paste
specific gravity.....	1.6
viscosity.....	thixotropic
tensile bond strength steel to steel cured 1hr 150C, abrasive blasted surfaces, tested at RT.....	9,597 psi
lap shear etched aluminum to etched aluminum, cured 2 hour at 125°C, tested at RT.....	5,600 psi
lap shear etched aluminum to etched aluminum, cured 2 hour at 125°C, tested at 200°C.....	200 psi
maximum continuous use temperature.....	150°C
maximum short time use temperature.....	170°C
bondline thickness.....	0.002-.003 in.

CURE CONDITIONS

Cure according to one of the following cure schedules:

1 hr. 150°C, 1hr 140°C, 2 hr 125°C, 4 hr 115°C

All times shown are the time after the bondline has reached the specified temperature. For larger parts or if the oven is heavily loaded the total oven time will need to be increased. This can be minimized by using high speed curing methods such as infrared, hot air tunnel etc.

STORAGE

Refrigerated storage is required. Shelf life is at least 12 months in a freezer (-7°C), 9 months in a refrigerator (4°C), and 5 months at room temperature (25°C).

HANDLING

All contact with skin or ingestion should be avoided in accordance with normal handling procedures with epoxy resins. No warranty or guarantee is made regarding this material. The user should determine suitability for a given application. For more information see MSDS.

PRICING

2 oz. jar \$90.00 ea., 1 lb. jar \$200.00 ea.

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