

GP-Adhesive – K-008

Description:

GP- Adhesive is an all purpose epoxy used for bonding ceramic tiles and general industrial use. GP-ADHESIVE is a two component, 100% solids, BGE¹ and VOC-free, epoxy resin system specifically formulated to bond a variety of materials. The paste-like consistency allows for easy application, including vertical surfaces. GP-ADHESIVE can be used to bond metal, wood, glass, concrete, fiberglass, plastic and ceramic tiles. GP-ADHESIVE may also be used as a patching compound, gap filling material and caulk or corrosion inhibiting coating in general plant use.

Handling Properties:

CONSISTENCY	Non-Sag Paste	
SPECIFIC GRAVITY, g/cm ³	1.73	ASTM D 792
WORKING TIME @ 72 °F (22 °C), min	45	
GEL TIME @ 72 °F (22 °C), min		ASTM D 2471
14 fl. oz. (414 ml)	60	
1/16 in. (1.6 mm) film	120	

Physical Properties:

COMPRESSIVE STRENGTH, psi (MPa)	10,000*	(69)	ASTM D 695
TENSILE STRENGTH, psi (MPa)	3,700	(26)	ASTM D 638
FLEXURAL STRENGTH, psi (MPa)	6,500	(45)	ASTM D 790
TENSILE SHEAR STRENGTH, psi (MPa)	2,400	(17)	ASTM D 1002
HEAT DISTORTION TEMPERATURE, °F (°C)	147	(64)	ASTM D 648
MAXIMUM CONTINUOUS SERVICE TEMPERATURE, °F (°C)	200	(93)	
HARDNESS @ 72 °F (22 °C), Shore D	87		ASTM D 2240

*Lower modulus materials often do not exhibit a definite yield point. The compressive strength stated was recorded at a loading speed of 0.05 in/min and at a point in which samples had been deeply compressed. The sample had not yet fractured at the point testing was discontinued.

Curing Procedures:

The working time (the time you have before it sets) of GP-ADHESIVE will vary according to the air temperature. The average working time at 70 °F (21 °C) will be 45 minutes for approximately 1 pint (0.5 l) of mixed material. In cooler weather, you will have more time to work with the material, and in hotter weather you will have less time.

The cure time (the time before the parts can be used) will also depend on the air temperature and the temperature of the parts themselves. The average cure time from the last application to start-up at 70 °F (21 °C) will be 4 to 5 hours. Preheating the parts will accelerate the cure time. Do not heat parts hotter than 100 °F (38 °C).

¹Butyl Glycidyl Ether. The EPA (SARA Title III, section 312) lists BGE as "Toxic" (per ANSI Z129.1) by skin absorption and an immediate health hazard.

**Surface
Preparation:**

Preparation of Concrete: Remove all oil, grease, or contaminated concrete. Chip the surface down to sound aggregate. The concrete must be **dry** and have no standing water. Acid etching surface preparation procedures may result in poor bond and should be avoided. Do not prime or seal concrete surfaces.

Preparation of Metal: Metal surfaces should be sand blasted to a "white metal" condition. If it is impossible to apply GP-ADHESIVE within 24 hours of sand blasting, the surfaces should be primed with Cops K-049 Primer. Do not use porch and deck enamel or red-lead primer.

Mixing:

GP-ADHESIVE is packaged in two-gallon (7.57 l) pre-measured kits of resin and hardener. To use, simply mix the resin and hardener in a 1:1 ratio by volume and apply. Unmixed material remaining in the cans may be resealed for future use.

Uncured GP-ADHESIVE can be removed from tools and equipment with non-flammable Cops Enviro Kleen, isopropyl alcohol, xylol or ketones.

Packaging:

K-008-24.5: 2 Gallon (7.57 l) = 450 in.³ (7,374 cm³)

SAFETY PRECAUTIONS

Avoid breathing of vapors. Forced local exhaust is recommended to effectively minimize exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions (such as heated polymers, sanding) may cause high vapor concentrations. **DO NOT WELD, BURN OR TORCH NEAR OR ON, ANY EPOXY MATERIAL. HAZARDOUS VAPOR IS RELEASED WHEN AN EPOXY IS BURNED.** Avoid skin or eye contact. Wash skin with soap and water if contact occurs. If eye contact occurs flush with water of 15 minutes and obtain medical attention. Read and understand all cautions on can labels and safety data sheets before using this material.

WARRANTY AND DISCLAIMER

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