

Concrete Repair Epoxy – K-079

Description:

Copps' K-079 Concrete Repair Epoxy is a unique formula developed for structural concrete repair by crack injection, gravity feed or patching. It can be used as a liquid binder for sand, aggregate or any other mineral filler to patch or resurface damaged concrete slabs. This material may be used to repair masonry, wood, and other rigid construction materials. K-079 is 100% solids, VOC free and Butyl Glycidyl Ether (BGE)* free.

K-079 meets or exceeds requirements of ASTM C 881 or AASHTO M-235 (Types I, IV, Grade 2, Class C).

Product Advantages:

- USER FRIENDLY MIX RATIO
- B.G.E. FREE
- LONG WORKING TIME
- MEDIUM VISCOSITY
- EXCELLENT ADHESION
- ASTM C 881 COMPLIANT

Application Guidelines:

K-079 Concrete Repair Epoxy has a user friendly mixing ratio (2:1 by volume) which allows its application by dual cartridges or automatic injection equipment.

Handling Properties:

COMPONENTS	Resin, Hardener		
WEIGHT PER GALLON (MIXED)	8.79		
DENSITY (MIXED) kg/l	1.05		
MIX RATIO, pbv (pbw)	2/1	(2.3/1)	
COLOR	Clear		
MIXED VISCOSITY, cP or mPa.s	3,000		ASTM D 2196
WORKING TIME, min	80		
GEL TIME, min	130		
APPLICATION TEMPERATURE, °F (°C)			
Ideal	70-90	(21-32)	
Acceptable	60-100	(15.5-37.8)	

Physical Properties:

HARDNESS, Shore D	80		ASTM D 2240
ADHESION to concrete, psi (MPa)	> 800	(5.5)	(100% failure in concrete)
COMPRESSIVE STRENGTH, psi (MPa)	14,000	(96.5)	ASTM D 695
TENSILE STRENGTH, psi (MPa)	8,000	(55.2)	ASTM D 638
ELONGATION @ BREAK, %	10.0		ASTM D 638

*Butyl 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:**

To achieve excellent adhesion, the substrate should be free of all loose and foreign material and should be clean. Oils, grease, waxes or other contaminants must be removed prior to application. Be sure the crack is open where ports are placed. Set ports with Copps' Non-Corrosive Crack Sealing Paste K-093 or GP Adhesive K-008.

Mixing:

Mix 2 parts A (resin) to 1 part B (hardener) for 3 minutes using a Jiffy Mixer and a slow speed drill. Mix at slow speed (less than 500 rpm) to avoid air entrainment. DO NOT mix more material than can be used within the stated working time. REMEMBER - you will have less working time at higher temperatures.

K-079 Concrete Repair Epoxy, before it is fully cured (hard), may be removed from tools with Copps Enviro Kleen solvent or warm soapy water.

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 polymer, sanding) may cause high vapor concentrations. Do not weld on, burn or torch K-079 Concrete Repair Epoxy or any epoxy material. Hazardous vapor is released when an epoxy is burned. Wash skin with soap and water if contact occurs. If eye contact occurs flush with water for 15 minutes and obtain medical attention. Read and understand all cautions on can labels and safety data sheets before using this material.

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