ASTM D 2196



Concrete Repair Epoxy – K-073

Description:

Copps' K-073 Concrete Repair Epoxy is a unique formula developed for structural concrete repair by crack filling, 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-073 is 100% solids, VOC free and Butyl Glycidyl Ether (BGE)* free.

K-073 meets or exceeds requirements of ASTM C 881 or AASHTO M-235 (Types I, Grade 2, Class C).

Product

Advantages:

- USER FRIENDLY MIX RATIO
- B.G.E. FREE
- ASTM C 881 (AASHTO M-235) COMPLIANT
- HIGH VISCOSITY
- EXCELLENT ADHESION
- HIGH HARDNESS

Application Guidelines:

K-073 Concrete Repair Epoxy has a user friendly mixing ratio (4:1 by volume) which allows its application by dual cartridges or automatic injection equipment.

Handling
Properties:

COMPONENTS	Resin, Hardener	
WEIGHT PER GALLON (MIXED)	12.3	
DENSITY (MIXED) kg/l	1.47	
MIX RATIO, pbv (pbw)	4/1	(6.5/1)
COLOR	Blue	
MIXED VISCOSITY, cP or mPa.s	7,800	
WORKING TIME, min	45	
GEL TIME, min	53	
APPLICATION TEMPERATURE, °F (°C		
Ideal	70-80	(21-27)
Acceptable	55-90	(13-32)

Physical Properties:

HARDNESS, Shore D	93		ASTM D 2240
ADHESION to concrete, psi (MPa)	> 800	(5.5)	(100% failure in concrete)
COMPRESSIVE STRENGTH, psi (MPa)	13,300	(91.7)	ASTM D 695
TENSILE STRENGTH, psi (MPa)	5,700	(39.3)	ASTM D 638
ELONGATION @ BREAK, %	2.1		ASTM D 638
WATER ABSORPTION, %	0.17		ASTM D 570

^{*}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 contaminates <u>must</u> be removed prior to application.

Mixing:

Mix 4 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-073 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-073 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.

FOR INDUSTRIAL USE ONLY

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