

## CCS™ BONDER, TRAFFIC MARKER PASTE

## **Epoxy Paste Adhesive For Bonding Traffic Markers To Pavement**

CCS Bonder Paste, Traffic Marker is a two-component, short working life, non-sag, epoxy paste adhesive designed for application on pavements to bond traffic markers and preformed curbs and car stops in parking lots. The product meets the State of California Specification 8040-51M-09, "Standard Set Epoxy Adhesive for Pavement Markers." Suitable substrates include concrete, masonry, stone and asphalt. All substrates must be surface dry at the time of epoxy adhesive application. Bonder Paste, Traffic Marker features a convenient 1: 1, by volume component mix ratio. Its buttery nature contributes to ease of application and efficient product use. The components do not contain volatile solvents (VOC's).

## **Features**

Convenient 1:1, by vol. mix ratio
Short work life/fast cure for short downtime
Non-sag consistency for efficient use
Meets State of California Specification 8040-51M-09
Environmentally safe - No VOC solvents

**Limitations:** Substrates must be surface dry. The recommended minimum substrate temperature during installation and for cure is 50 deg. F. The recommended maximum substrate temperature during application is 100 deg. F. When hand mixing the adhesive, it is recommended that not more than one quart be mixed at one time, and the markers aligned and pressed into place within five minutes after mixing operations are started. Do not add solvents or otherwise thin this material.

**Packaging & Colors:** Standard package sizes of Part A + Part B are 2 and 10 gallons. Color is Concrete gray (blue-gray).

**Shelf Life:** Three years minimum in unopened, original containers when stored between 60 and 90 deg. F in a dry place away from sunlight. Remixing of components may be required upon prolonged storage.

Chemical Resistance: Bonder Paste, Traffic Marker has excellent resistance to a wide range of commonly encountered deicing chemicals, salts and aircraft and automotive fluids. It has limited resistance to hydrocarbon solvents. Performance is a function of the specific chemical and concentration, exposure times and housekeeping procedures. For information on specific chemicals and exposure conditions, contact a ChemCo Systems, Inc., technical representative.

**Surface Preparation** Substrates must be surface dry, sound and free of all bond-inhibiting substances. Prepare surfaces in accordance with *ASTM D 4259* or *ACI 503R* and ChemCo Systems' specific recommendations. Remove all loose, unsound and deteriorated pavement surface layers. Cleaned concrete surfaces should have a minimum strength of 250 psi in direct tension.

**Mixing:** Bonder Paste, Traffic Marker is a two-component system. The resin to hardener (Part A:Part B) mix ratio is 1:1, by volume. Read all material safety data (MSDS) information before handling the product. Wear safety glasses and clean neoprene rubber gloves when handling the materials. Premix the individual components before drawing from bulk packaging. Transfer the appropriate quantities of Part A and Part B into a mixing container. Use quantities that can be applied before the pot life of the material expires. When hand mixing the adhesive, it is recommended that not more than one quart be mixed at one time. Blend thoroughly using a Jiffy mixer blade attached to a low speed (350 - 750 rpm) electric or pneumatic drill. Proper mixing will take 2 - 3 minutes.

**Installing:** Apply mixed material uniformly on the cleaned pavement surface or on the bottom of the marker in a quantity sufficient to result in complete coverage of the area of contact of the marker with no voids present and with slight excess after the marker has been pressed into place. The marker is placed in position and pressure applied until firm contact is made with the pavement. Immediately remove excess adhesive around the edge of the marker, excess adhesive on the pavement, and adhesive on the exposed surfaces of the markers. Clean mixing and application tools frequently.

**Clean up:** Excess mixed product is best removed from the work area and tools before it hardens. Use of rags and solvents such as acetone or heavy-duty detergents facilitate cleaning. Cured product may be removed from tools by soaking in an epoxy stripper.

## TYPICAL PROPERTIES (1)

Property (2)		Test Method	Value
Mix Ratio, A:B,	by vol		1:1
	by wt		100:102
Color:	Part A	Visual	White
	Part		Black
	Mixed		Gray
Weight per Gallon, lb:	Part A	ASTM D 1475	11.0 - 11.3
<b>0</b> 1	Part B		11.3 - 11.6
	Mixed		11.2 - 11.5
Gel Time, 120 g, minutes		ASTM D 2471	10
Initial Set to Bear Traffic	c, hours		
	@ 90° F		2
	@ 70° F		4
	@ 50° F		7
Full Cure Time, hours			24
Slant Shear Strength		AASHTO T-237	
ASTM C 109 cement mortar), psi (dry to dry)			Cement mortar failure (3)

<sup>(1)</sup> The properties listed are typical and descriptive of the product and should not be used for specification purposes. For specification preparation, reference the ChemCo Systems, Inc., product guideline specification.

**Handling and. Toxicity:** This bulletin does not accompany the product when sold. For hazard warnings, safe handling and first aid instructions, READ CAREFULLY THE MATERIAL SAFETY DATA SHEETS AND CONTAINER WARNING LABELS. <a href="Part A:">Part A:</a> Liquid epoxy resin, HMIS Health Hazard Rating- 2 (Moderate Hazard). Warning! Causes eye and skin irritation. May cause allergic skin reaction. Harmful if swallowed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin.

<u>Part B:</u> Liquid epoxy hardener, HMIS Health Hazard Rating- 3 (Serious Hazard). Contains alkaline amines. Danger! Causes severe eye and skin burns. May cause allergic skin and respiratory reaction. Combustible, corrosive. Do not get in eyes or skin or on clothing. Avoid breathing vapor. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Keep away from heat and open flame.

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CCS<sup>™</sup> is a trade name of ChemCo Systems, Inc.

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<sup>(2)</sup> Cure schedule, 7 days at 73° ± 4 F and test temperature, 73° ± 4 F unless otherwise indicated.

<sup>(3)</sup> Compressive strength of cement mortar, 4500 psi.