

HUDCO Industrial Products, Inc.

Anti-Abrasive

Ballistic Grade Aramid Fiber Reinforced High Temperature Wear Compound

HUDCO Formula 5100

HUDCO Formula 5100 combines high-strength, high temperature epoxy resins with a dense loading of wear-resistant alumina and silicon carbide ceramic aggregate. Used as an easy- to-apply coating, HUDCO Formula 5100 is a cost-effective alternative to the installation of wear-resistant ceramic tile in high temperature applications. Repairs to worn equipment made with Formula 5100 provide the advantage of a prolonged wear life far beyond that of the original part.

Reinforced with Ballistic Grade Aramid Fiber

HUDCO in 1994 formulated Formula 5100 to include ballistic grade aramid fiber reinforcement in the polymer matrix. The addition of ballistic grade aramid fiber, one of the toughest materials in existence, has significantly improved the phenomenal properties of HUDCO Formula 5100. The unique concept of using ballistic grade aramid fiber to reinforce the matrix of HUDCO Formula 5100 demonstrates HUDCO's commitment to world class technology.

Beneficial Properties of HUDCO Formula 5100

- Can be used for wear-resistant protection or repairs.
- Does not shrink or expand.
- Provides wear life far beyond that of the original part.
- Conforms quickly to odd shapes.
- Requires no special application skills

Typical Applications

HUDCO Formula 5100 provides excellent wear protection in a wide range of applications including chutes, screw conveyors, pneumatic conveying equipment, and other areas where high wear occurs

Physical Properties

Compressive Strength ASTM D-695	17,000 PSI
Heat Deflection Temperature ASTM D-648	325° F
Tensile Strength ASTM D-638	8,500 PSI
Pot Life	25 Min. @ 75° F
Gel Time	30 Min. @ 75° F

Packaging

Resin	Curing Agent	Kit Weight
4 lbs.	1 lb.	5 lbs.
16 lbs.	4 lbs.	20 lbs.



This reference guide is not intended as a substitute for the product label for the products referenced herein. Product labels for the above products contain important precautions, directions for use and product warranty and liability limitations that must be read before using the product. Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions.

Application Instructions

Surface Preparation:

(A) Surface of substrates must be clean and sound. Remove grease, oil, or other foreign material with acetone, wire brushing, or sandblasting. Acid etching the surface is acceptable if followed by thorough flushing with clean water.

(B) Roughen surface by grinding or sandblasting (3-5 mil surface profile) Surface must be completely dry with a minimum surface temperature of 75° F before applying.

Mixing: Mix 4 parts of HUDCO Formula 5100 Resin to 1 part of HUDCO Formula 5100 Hardener by weight. Kits are supplied in the correct ratio. Ensure that the sides of the mixing container are scraped into the mixture. Mix several minutes, until consistent color is achieved.

Application: Apply product to prepared surface and use supplied tools to achieve desired finish.

Curing: At 75° F, product will gel in 30 min. Initial cure will occur in 2-4 hours. **In order for the product to reach its 325° F potential, it must be post cured for 8 hours at a temperature of 200° F or higher.**

Safety Precautions

CAUTION: For Industrial Use Only. Keep Away From Children.

HUDCO Formula 5100 Resin contains epoxy resin which is harmful if swallowed. After prolonged exposure it may irritate skin and cause sensitization and/or dermatitis.

HUDCO Formula 5100 Curing Agent contains organic amine compounds which are harmful if swallowed. After prolonged exposure or repeated skin contact it may cause irritation, sensitization and/or dermatitis.

Emergency and First Aid Procedures

- Eye Contact - Irrigate with clean water for 15 minutes and call a physician.
- Skin Contact - Wash with soap and water.
- Inhalation - Remove to fresh air and provide oxygen if necessary.
- Ingestion - Call a physician at once. Give milk or white of egg beaten with water. Then give a teaspoon of salt in a glass of warm water to induce vomiting.

Protection Procedures

If used in a confined or an enclosed area, use an air supplied mask or respirator with canister for organic vapors and provide mechanical exhaust ventilation. Use protective gloves, safety glasses, and protective clothing. Avoid contact with skin and clothing. Contaminated clothing should be laundered before wearing again. Contaminated shoes should be thoroughly cleaned before wearing again.

Storage

HUDCO Formula 5100 Resin and Curing Agent should be stored in a cool, dry area. Shelf life is a minimum of one year in unopened containers when stored at 70° F – 85° F.

Warranty

Because the storage, handling and application of these materials are beyond our control, we can accept no liability for the results of their use. Our liability is limited only to replacement of any material proven defective in manufacture. We suggest users try small applications to determine the suitability of the product for their intended use.

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