



# EPG 2000

## High Performance Epoxy Machine Grout

### DESCRIPTION

EPG 2000 is a three component, 100% solids, high performance epoxy machine grout developed for the support of heavy equipment. The system combines a high quality epoxy resin and curing agent with an engineered blend of graded aggregates to produce a flowing grout with even aggregate distribution. When properly placed and cured, EPG 2000 provides a durable surface with resistance to chemicals, vibration and dynamic loads commonly subjected to equipment foundations.

### USES

EPG 2000 is an ideal product for high stress applications found in all heavy industry as well as:

- Installation of critical equipment
- Quick turnaround re-grouting applications
- Protections of foundations subject to oil and chemical attack

### BENEFITS

- Helps maintain vertical alignment in harsh conditions
- Low exothermic cure, 2'-18" pour capability
- High impact, compressive and early strengths
- High effective bearing area
- Increased chemical resistance over concrete
- Excellent flowability
- Low toxicity formulation, soap and water cleanup
- Meets USDA specifications for use in food processing areas
- Consistent: Strict Quality Control testing and standards

### SURFACE PREPARATION

All surfaces in contact with EPG 2000 shall be free of dirt, oil, grease, laitance and other contaminants that may act as bond-breakers. All unsound concrete should be removed to ensure a good bond. Use mechanical means such as shotblasting to attain a profile of 1/8" to expose fractured aggregate. Surface must be free of any moisture. Steel must be shotblasted to a white metal finish. Items not intended to bond to grout such as leveling screws, wedges and bolts, must be protected with wax, caulk, duct tape or similar.

### FORMING

Epoxy grouts require heavy duty forms. A sheet of 3/4" plywood and proper bracing should be used to hold the force of the weight of the grout. Forms should be coated with a minimum of two coats of an industrial paste wax to facilitate removal after cure. Forms should have 45° angle chamfer strips at all vertical corners and horizontal grout grade elevation in order to eliminate sharp corners. Caulk, putty or similar sealant should be used to render the forms watertight. Forms should be designed to allow for an hydraulic head to facilitate the placement of EPG 2000.

### PHYSICAL PROPERTIES

TEST	RESULTS
ASTM C-579* Compressive Strength (1 day)	8,300 psi
ASTM C-579* Compressive Strength (7 days)	13,430 psi
ASTM C-579* Compressive Strength (21 days)	16,700 psi
ASTM C-579 Compressive Modulus	2,156,000 psi
ASTM C-531 Coefficient of Thermal Expansion Temp	23 x 10 <sup>-6</sup> in/in/°F
ASTM C-696 Coefficient of Thermal Expansion	7.4 x 10 <sup>-6</sup> in/°C
ASTM C-307 Tensile Strength (14 days)	2,418 psi
ASTM C-580 Flexural Strength (14 days)	5,304 psi
ASTM C-882 Bond Strength (14 days)	3,620 psi
ASTM D-2240 Shore D Hardness	91

\*C-579 Test Method B / Plastic Inserts  
(sand to resin / 3.25:1 by volume)

AMBIENT TEMP	WORKING TIME	CURING TIME
65°F/18°C	5 hours	55 hours
70°F/21°C	4 hours	45 hours
75°F/24°C	3.5 hours	40 hours
80°F/27°C	3 hours	35 hours
85°F/29°C	2.5 hours	30 hours
90°F/32°C	2 hours	25 hours
95°F/35°C	1.5 hours	20 hours
100°F/38°C	1 hour	15 hours

### MIXING

For best results, mix thoroughly before each use. Do not over agitate or use high speed mixing equipment. Pre-mix each part individually before combining. Mix part A and B together on low RPM for a total of 3 to 5 minutes to achieve desired consistency. After liquid components are mixed slowly add Component C (aggregate). Mix only until all aggregate is wetted out.

### PLACING

Place grout on one side of area. Let grout flow to opposite and adjacent sides to avoid entrapment of air and uneven bearing of the grouted surface. Strict adherence to temperature considerations will assist the placement properties. Check forms frequently for leaks. Plug leaks with **US SPEC Hydraulic Cement**. EPG 2000 will not self seal.



# EPG 2000

## High Performance Epoxy Machine Grout

### FINISHING AND CURING

When forms are filled to desired elevation, exposed horizontal surfaces of **EPG 2000** may be finished with a surfactant such as xylol or toluene and a paintbrush or small hand trowel. Surfactant should be lightly sprayed or misted on the surface. Do not puddle on the surface. This process can be repeated every 30 minutes until surfaces are firm.

### STORAGE

Protect from freezing. Store material in an interior, cool dry place above 45°F (7°C). Shelf life is one year in original, unopened container.

### CLEAN-UP

Clean tools and equipment with warm, soapy water. After material has dried, it may be necessary to use solvents such as mineral spirits, toluene or xylene.

### LIMITATIONS

In addition to the limitations already mentioned, please note the following. Epoxy resins are extremely temperature sensitive. Care should be taken to condition all components to between 75°F (24°C) and 90°F (32°C) for a minimum of 24 hours prior to mixing and placement. **EPG 2000** should not be applied to "green" concrete (less than 28 days old) or over curing compounds. Do not apply when the temperature of the concrete is below 40°F (4°C). Do not mix with any other products. Do not pour unused material back into original container.

### REGULATORY

Read and follow application information, precautions and Material Safety Data Information.

#### **HMIS**

Health 3, Fire 1, Reactivity 1

#### **VOC Content**

0 g/L

AMINES, LIQUID, CORROSIVE, N.O.S. UN2735.

Keep away from heat, sparks and open flame.

### CAUTION

Avoid contact with skin. Protective clothing is recommended. Contact areas should be thoroughly washed with soap and water. Avoid contact with eyes. Protective goggles are recommended in case of splashing. Flush eyes with water if contact occurs. Avoid ingestion of material. If ingestion occurs, contact a poison center or physician.

Component "A" IRRITANT

Component "B" CORROSIVE

Product is a strong sensitizer.

### TECHNICAL SERVICE

US MIX Co.

112 South Santa Fe Drive

Denver, CO 80223

Tel: 303.778.7227 Fax: 303.722.8426

Web Site: [www.usspec.com](http://www.usspec.com)

**NOTICE OF LIMITED WARRANTY** US MIX Co. (manufacturer) warrants to buyer that this product at the time and place of shipment is of good quality and conforms to the manufacturer's specifications in force on the date of manufacture when used in accordance with the instructions hereon. Manufacturer cannot warrant or guarantee any particular method of use, application or performance of the product under any particular condition. This limited warranty cannot be extended or amended by manufacturer's sales, people, distributors or representatives or by any sales information, specifications of anyone other than the manufacturer. Liability under this warranty is expressly limited to refund of the purchase price.

**LIMITATION OF WARRANTIES AND LIABILITY** Buyer assumes all risks associated with the use of this product. Manufacturer expressly disclaims all warranties expressed or implied including the warranties of merchantability and fitness for a particular purpose and all other warranties otherwise arising by operation of the law, course of dealing, custom, trade or otherwise. Buyer's exclusive remedy if this product is proven to be defective is limited to refund of purchase price by the manufacturer. Refund shall only be available if the buyer notifies manufacturer in writing within thirty days following discovery of any defect. Written notice shall be forwarded to US MIX Co. at 112 South Santa Fe Drive, Denver, Colorado 80223. No claim can be made twelve months after purchase of the product. Twelve months after the purchase manufacturer's duties with respect to the product and limited warranty shall be presumed to have been satisfied. Manufacturer in no event is liable for consequential damages.

**Yield: A 70 lb unit yields 0.5 ft<sup>3</sup> (0.014 m<sup>3</sup> unit). A 280 lb unit yields 2.0 ft<sup>3</sup> (0.057 m<sup>3</sup> unit)**