

**RUST-OLEUM®****EPOXY GROUT QS****DESCRIPTION AND USES**

Epoxy Grout QS is used in setting machinery foundations, footers, anchor bolt sleeves, and in other applications where reciprocating or rotating equipment is installed, or where heavy load bearing capacity is required. Excellent bond to concrete along with high compressive, flexural and tensile strength make Epoxy Grout QS ideally suited to resist vibration, high torque loads and other physical stresses.

Epoxy Grout QS is a three component formulation of epoxy resin, amine activator, and a formulated low dusting aggregate.

This CPS Type II product is typically installed by factory trained contractors. Be sure you are fully aware of all application procedures and have all the required equipment available prior to beginning the installation of this product.

**FEATURES AND BENEFITS**

- **Excellent bond strength:** Epoxy Grout QS has excellent bond strength to both dry and damp concrete. The material to concrete bond exceeds the tensile strength of the concrete itself.
- **Chemical Resistance:** With chemical resistance equal to our OverKrete product. Epoxy Grout QS offers resistance to acids, alkalis, and solvents. Consult Rust-Oleum for recommendations. (For even better chemical resistance, Epoxy Grout CR may be used or Epoxy Grout QS may be top coated with Rust-Oleum (OverKote or OverKote Plus) toppings.
- **Low exothermic cure:** Virtually eliminates bond interface stresses.
- **Minimum shutdown:** Depending on ambient temperature, area can be returned to use within 6 to 16 hours, therefore reducing downtime. Scheduling problems caused by the slow cure of Portland cement grouts can often be avoided with the use of Epoxy Grout QS.
- **Reduced labor:** Epoxy Grout QS may be applied to damp concrete (with no standing water). It may also be easily top coated with other Rust-Oleum products within 24 hours with no additional surface preparation, thus reducing labor costs.
- **Low dusting:** Specially formulated aggregate reduces dusting during application providing a cleaner and safer work environment.

**PACKAGING**

Epoxy Grout QS is packaged in one kit size: 0.44 cubic foot. Mixing ratios are shown on the product labels.

**The 0.44 cubic foot kit includes:**

Part A (resin): (1) 1 gallon bucket (0.74 U.S. gal.)

Part B (activator): (1) 1 quart F-style can (0.26 U.S. gal.)

Part C (aggregate): (1) 50 lb. bags of a formulated, low dusting aggregate

All components are combined within a 6.5 gallon bucket. Aggregate is over-packed for mix design modification.

**PRODUCTS**

SKU	Description
237402	0.44 Cubic Foot Kit

**TYPICAL APPLICATIONS**

Physical abuse: Epoxy Grout QS is used in heavy industry to ensure accurate, sustained alignment of machinery, compressors and other equipment across a wide range of industries as well as for foundations for heavy stationary tanks, rails and towers. For improved aesthetics and chemical resistance, Epoxy Grout QS can be top coated with many of the OverKote series products.

**Typical applications include:**

Anchor bolts  
 Bearing plates  
 Compressors  
 Conveyor supports  
 Drive equipment  
 Cooling towers  
 Crushers  
 Engines  
 Generators  
 Pumps  
 Milling machines  
 Paper machines  
 Patching  
 Foundations  
 Turbines  
 Vessels and tanks  
 Rails

**Typical industries include:**

Pulp and paper  
 Petrochemical processing  
 Chemical processing  
 Power transmission  
 Metal refining/mining  
 Heavy manufacturing  
 Food and Beverage

Chemical abuse: Epoxy Grout QS may also be used to resurface those areas where the concrete has severely deteriorated from chemical exposure due to manufacture or storage of products.



## TECHNICAL DATA

# EPOXY GROUT QS

### PRODUCT APPLICATION

#### SURFACE PREPARATION

Preparation of the existing concrete is the most important step in the installation of Epoxy Grout QS. All grease, oil and other contamination must be removed. The surface of the concrete must be clean and rough to enable the epoxy based polymer to achieve maximum bond. Mechanical methods, including chipping, abrasive blasting, scabbling, and grinding are used to prepare the surface.

**NEW CONCRETE:** New concrete should be cured for a minimum of 10 days prior to application of Epoxy Grout QS. Curing compounds should be limited to those which can be removed by mechanical scarification of the surface.

#### MIXING

**0.44 cubic foot kit:** Pre-mix part A for 30 seconds using an electric drill with a Jiffiler attachment. Pour the complete container of Part B activator into the Part A resin. Mix for 60 seconds to ensure complete mixing of Parts A and B. Pour the mixed liquids into the 6.5 gallon bucket and place on a bucket mixer. Start the mixer. Pour 1 bag of aggregate into the bucket mixer and mix until particles are completely coated by the liquids. Immediately pour the material into the void or form.

#### USE OF FORMS

Epoxy Grout QS is a high flow grout and often requires the use of forms. Forms are generally wood and must be of sufficient strength, properly braced, and water tight. You must use a release agent such as paste wax in order to remove the forms easily.

#### APPLICATION

Epoxy Grout QS is applied by pouring into an enclosed void in the substrate or a pre-assembled form. With temperatures ranging from 65-90°F, working time will be between 30 and 60 minutes. At temperatures above 90°F, working time will be shorter (possibly requiring more application personnel or smaller batches). The mortar is loosely placed at a thickness of 2 to 3 inches in one pour. If additional grout is needed, wait at least one hour between succeeding pours. The material can be leveled rapidly using standard hand tools for finishing concrete.

For more information on application procedures, refer to the Epoxy Grout Application Instructions Bulletin.

#### CLEAN UP

Xylene can be used to remove material from equipment if it is cleaned before the material has started to set up; otherwise, stronger solvents such as methylene chloride will be necessary.

### PRODUCT APPLICATION (cont.)

#### SAFETY

Epoxy Grout QS contains amine curing agents. Avoid skin contact. In case of eye contact or ingestion, contact a physician immediately. In case of skin sensitivity to these materials, use protective clothing and gloves.

#### SAFETY DATA SHEETS

Safety Data Sheets are available upon request. It is strongly recommended that they be read by all persons handling Epoxy Grout QS.

If there are any questions on the use of this product, please consult our technical service department.

### PERFORMANCE CHARACTERISTICS

#### COMPRESSIVE STRENGTH

METHOD: ASTM C579  
TYPICAL VALUE: 16,100 psi

#### FLEXURAL STRENGTH

METHOD: ASTM C580  
TYPICAL VALUE: 5,550 psi

#### MODULUS OF ELASTICITY

METHOD: ASTM C580  
TYPICAL VALUE: 2.51 x 10<sup>6</sup> psi

#### TENSILE STRENGTH

METHOD: ASTM C307  
TYPICAL VALUE: 2,940 psi

#### BOND STRENGTH TO CONCRETE

METHOD: ASTM D4541  
TYPICAL VALUE: 300-400 psi. Concrete fails first

#### LINEAR SHRINKAGE

METHOD: ASTM C531  
TYPICAL VALUE: 0.025%

#### THERMAL COEFFICIENT OF EXPANSION

METHOD: ASTM C531  
TYPICAL VALUE: 19 x 10<sup>-6</sup> in./in./°F

#### FILM HARDNESS, SHORE D

METHOD: ASTM D2240  
TYPICAL VALUE: 90-94

#### PEAK EXOTHERM

METHOD: ASTM D1640  
TYPICAL VALUE: 1,300°F internal at 72°F ambient (0.44 ft.<sup>3</sup> mix)

#### DRY THROUGH TIME

METHOD: ASTM D1640  
TYPICAL VALUE: 1.40 hours (0.44 ft.3 mix)

#### HIGH HEAT RESISTANCE RANGE

METHOD: ASTM D648  
TYPICAL VALUE: 225°F



## TECHNICAL DATA

### EPOXY GROUT QS

#### PHYSICAL PROPERTIES

		EPOXY GROUT QS
<b>Resin Type</b>		Polyamine Converted Epoxy
<b>Pigment Type</b>		Titanium Dioxide, Phthalo Blue
<b>Solvents</b>		Benzyl Alcohol
<b>Weight*</b>	<b>Per Gallon</b>	9.3 lbs.
	<b>Per Liter</b>	1.11 kg
<b>Solids*</b>	<b>By Weight</b>	100%
	<b>By Volume</b>	100%
<b>Volatile Organic Compounds*</b>		<125 g/l (1.04 lbs./gal.)
<b>Mixing Ratio</b>		2.8:1 base to activator by volume
<b>Induction Period</b>		None
<b>Working Time</b>		20-40 minutes
<b>Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity</b>	<b>Form Removal</b>	1-2 hours
	<b>Service Ready</b>	6-16 hours
	<b>Topcoat</b>	After 24 hours, the grout surface will require mechanical preparation.
<b>Shelf Life</b>		2 years
<b>Flash Point</b>		>185°F (85°C)
<b>Safety Information</b>		<b>CAUSES NOSE, THROAT, EYE AND SKIN IRRITATION. CAUSES EYE AND SKIN BURNS. HARMFUL IF SWALLOWED. MAY CAUSE ASTHMA, SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES. FOR INDUSTRIAL OR COMMERCIAL USE ONLY. SEE THE PRODUCT SAFETY DATA SHEET (SDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.</b>

\* Activated material

Calculated values are shown and may vary slightly from the actual manufactured material.

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