

DATA SHEET

D.T.3-35PI (8-02)

REGAME[®]
OKS-60



DESCRIPTION

REGAME OKS60 EPOXY GROUT is a three- component, 100% epoxy bonding material for chemical resistant masonry units and quarry tile. OKS60 Epoxy Grout and chemical-resistant masonry units used with a suitable membrane form a complete system to protect concrete and steel substrates from attack by corrosive chemicals and physical abuse.

TYPICAL USES / CHEMICAL RESISTANCE

REGAME OKS60 Epoxy Grout is used in the construction of floors, sumps, trenches, and food & beverage plants; dairies; laboratories; textile, steel, and pulp & paper mills. REGAME OKS60 Epoxy Grout has excellent resistance to a wide range of acids, alkalis and most solvents up to 212oF. REGAME OKS60 Epoxy Grout is recommended for exposure to hypochlorite or oxidizing agents such as nitric, chromic acid or sulfuric acid greater than 50%. Refer to Chemical Resistance Chart for specific service conditions. Complies with specifications of ASTM C658 and ANSI A118.3.

CHARACTERISTICS

- Low odor.
- Resists a wide range of acids, alkalis and most solvents.
- 100% epoxy.
- Withstands temperatures to 212oF.
- Inhibits the growth of bacteria.

METHOD OF INSTALLATION

REGAME OKS60 Epoxy Grout is designed to be installed by the Tiler's method. The quarry tile or brick pavers are set in a bond coat of REGAME OKS60 Epoxy Grout or REGAME SETTING BED, with a nominal 1/4" space between the masonry units. After the bond coat has set, the REGAME OKS60 Epoxy Grout is floated into the joints.

AVAILABLE COLORS

Standard colors are black, gray, white and red.

PHYSICAL PROPERTIES

Bond strength	Brick fails
Compressive strength - C579 (7-days)	12998 psi
Density - C905 (7 day)	124.7 lb./cu. ft.
Flexural strength - C580 (7 day)	4389 psi
Maximum service temperature	212oF
Initial Set (ANSI A118.3)	> 2 hours
% Shrinkage - C531 (7 day)	3.56 x 10 ⁻⁵
Tensile strength - C307 (7 day)	2567 psi
Water absorption - C413 (7 day)	0.15%

PACKAGING - REGAME OKS60

35 lb. 4 oz. (15.8 kg.) Unit

Two - 1/4-gal. can of Resin 2 lb. 5 oz. ea. (2.0 kg.); Two - 1/4-gal. can of Hardener 2 lb. ea. (1.8 kg.); One - bag of Powder 26 lb. 6 oz. (12.0 kg.) Nylon Scrub Pad, Rubber Gloves

TEMPERATURE DURING APPLICATION

Store REGAME OKS60 Epoxy Grout at 70°F (21°C) to 80°F (27°C) for 24 hours prior to use. The best working characteristics of the grout will be attained when the temperature of the substrate, air and REGAME OKS60 Epoxy Grout are between 60°F (16°C) and 85°F (29°C). Minimum temperature for installation is 45°F (7°C). At temperatures below 45°F (7°C), the product may not set or cure properly.

ESTIMATING TABLES - REGAME OKS60

COMMON FLOOR AND BRICK QUARRY TILE SIZES.

Inches	mm.	m ²
8"x4"x1/2"	200x100x12 mm	15
8"x8"x1/2"	200x200x12 mm	17
12"x6"x1/2"	300x150x12 mm	19
9 5/8"x4 5/16"x9/16"	245x110x14 mm	12
9 5/8"x4 5/16"x1 1/16"	245x110x18 mm	10
8"x4"x1 3/16"	200x100x30 mm	6
8"x4"x2 3/8"	200x100x60 mm	3

1/8" setting bed 5.0 m²(used as adhesive).

FLOOR AREA

Material estimating quantities may vary depending on job conditions and application techniques. Material quantities above are theoretical and don't include a safety factor. The above estimating is based on a weight ratio of 100 parts resin to 90 parts hardener to 600 parts powder. Decreasing the powder component to 500 parts will decrease the estimated coverage by approximately 6%; Decreasing the powder component to 450 parts will decrease the estimated coverage by approximately 12%.

MEASURING OF REGAME OKS60 EPOXY GROUT COMPONENTS

In the absence of a scale to weigh the components, approximate volume measurements are provided. Select a clean, dry, plastic or metal container equal to or larger than the desired component volume. Using a graduated measuring cup, measure and pour the prescribed fluid ounces (liters) of water into the container. Mark the fluid level. Remove the water and dry the container. At the fluid level mark, insert a self-tapping sheet metal screw through the side wall of the container. Clearly mark the container for the intended use resin, hardener or powder and the volume measurement.

Powder component: Loosely pour the powder to the fluid level mark. Do not shake the powder container to settle powder. Powder volumes listed on the Data Sheet are approximate.

TEMPERATURE OF WORKING AREA

At temperatures below 65oF, the viscosity increases, and application becomes more difficult. REGAME OKS60 Epoxy Grout can be applied at temperatures as low as 50oF. Consult with technical service for specific recommendations for environments colder than 50oF. Above 80oF, working time of the material decreases. In higher temperatures it is recommended that the Liquid be cooled by placing the pail in a large container filled with water and ice or storing in a cool area.

SURFACE PREPARATION

All surfaces in contact with REGAME OKS60 Epoxy Grout should be clean, dry, and free of dust, dirt, grease, oil, and other contaminants. Surface prep should be in accordance with American Concrete Institute (ACI) requirements.

MIXING OF THE REGAME OKS60 EPOXY GROUT

Empty correct proportion of Liquid into a clean mixing vessel. Gradually add measured amount of Powder while mixing continuously with a trowel or hoe until mortar is uniformly blended to a workable consistency. After mixing do not allow mortar to remain in the mixing vessel, spread mortar in a thin layer in a mortar pan to ensure maximum working time of 30 minutes at 73oF(23°C). Recommended mix ratio, parts by weight, is as follows:

PARTS BY WEIGHT

Liquid A	1.0	Powder	6.0
Liquid B	0.9		

Material which has begun to set cannot be retempered and must be discarded. Never add Liquid or other materials to mixed material or any component part.

TYPICAL WORKING AND SETTING TIMES OF THE REGAME OKS60 EPOXY GROUT

Temperature	Working Time	Support Foot Traffic
45°F (7°C)	65 minutes	24 hours
60°F (16°C)	55 minutes	9 hours
75°F (24°C)	45 minutes	7-1/2 hours
85°F (29°C)	25 minutes	4-1/2 hours

APPLICATION OF THE REGAME OKS60 EPOXY GROUT

- Place the freshly mixed REGAME OKS60 EPOXY GROUT on the tile or pavers.
- With a rubber faced or steel trowel work the grout into the open joints.
- The rubber faced trowel or rubber squeegee is used to remove excess grout. Hold the trowel with the flat edge nearly perpendicular to the surface and pull diagonally across the grouted joints. Remove as much residue as possible from the tile surface.

A second grout pass may be required on pavers 1-3/16" thick or greater to compensate for any settling or low joints. The second pass of grout must be applied within 2 to 24 hours following the initial grout application and cleaning. Occasional voids may form by entrapped air rising to the surface. The voids should be filled upon discovery and preferably while joints are still soft.

- **CLEANING OF THE REGAME OKS60 EPOXY GROUT** Prepare 5-gallon pails of warm cleaning water. A small amount of liquid detergent added to warm water will aid the cleaning process.
 - Change cleaning water frequently as it becomes laden with grout residue.
 - The removal of the grout residue may begin immediately after the grout has been placed in the joint.
 - Complete the cleaning of the tile within the working time listed on the "Typical Working and Setting Times" chart.
 - Replace nylon scrub pads or cellulose sponges as they become worn or laden with excess grout residue.
 - Rubber gloves should be worn at all times.
- Apply a small amount of warm water to the surface of the tile.
 - Using a nylon scrub pad or cellulose sponge, loosen the grout residue from the tile with a circular motion until a white froth appears.
 - Using a damp cellulose sponge remove the froth. Apply sufficient pressure to remove residue but not enough to pull grout from the joints.
 - Continue the cleaning procedure by frequently rinsing the cellulose sponge. Complete the cleaning with clean water until the surface is free of any haze.
 - A damp cotton towel or wool blanket can be used by dragging it across the surface of the tile. Frequently rinse and clean the cotton towel or wool blanket. Repeat the cleaning with clean water until surface is free of any haze.
1. A cellulose sponge may be used for final touch up cleaning.

After cleaning is completed, the floor area must be kept free of liquids and contaminants until the grout can support foot traffic as listed on the "Typical Working and Setting Times" chart.

EXPANSION/CONTROL JOINTS

Joints are to be provided on 20-foot centerlines, around all fixed objects, peripheries of rooms and all points of movement in the base slab. Consult technical service for product recommendation.

CLEANING OF TOOLS AND EQUIPMENT

Steel wool, soap and warm water will remove the materials referred to in this Data Sheet from mixing tools and equipment if cleaning is done immediately after use. Solvents, such as methyl ethyl ketone, toluene or xylene, will have to be used after the material has begun to harden. The fully hardened material will have to be removed by mechanical means.

Dispose of residues and wastes in accordance with the directions in the Material Safety Data Sheets and government regulations.

STORAGE AND SHELF LIFE

Store all materials in a cool, dry environment. Keep all materials out of direct sunlight. The ideal storage temperature is 75°F (24°C). Protect from freezing. In unopened original containers, the materials referred to in this Data Sheet have a shelf life of approximately one year.

PRECAUTIONS

The materials referred to in this Data Sheet are for Industrial Use Only. They contain materials that present handling and potential health hazards. Consult Material Safety Data Sheets and the container labels for complete precautionary information.

TECHNICAL SERVICES

Maintains a staff of Technical Service Representatives who are available to assist you with the use of products. In the event of difficulties with the application of materials, the installation should be stopped immediately and the Technical Service Department consulted for assistance.

WARRANTY

We warrant that our goods will conform to the description contained in the order, and that we have good title to all goods sold. WE GIVE NO WARRANTY, WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE OR OTHERWISE, EXPRESS, OR IMPLIED, OTHER THAN AS EXPRESSLY SET FORTH HEREIN. We are glad to offer suggestions or to refer you to customers using REGAME OKS60 EPOXY GROUT cements and compounds for a similar application. Users shall determine the suitability of the product for the intended application before using, and users assume all risk and liability whatsoever in connection therewith regardless of any suggestions as to application or construction. In no event shall we be liable hereunder or otherwise, for incidental or consequential damages. Our liability and your exclusive remedy hereunder or otherwise, in law or in equity, shall be expressly limited to our replacement of non-conforming goods at our factory or, at our sole option, to repayment of the purchase price of non-conforming goods.

CHEMICAL RESISTANCE OF REGAME OKS60 EPOXY GROUT D.T.3-35PI (8-02)

KEY: R - Recommended; N - Not Recommended; C - Conditional; May be serviceable if the contaminant is immediately removed or washed off the surface; A - Silica Filler may be attacked.

CHEMICAL	80°F	140°F	CHEMICAL	80°F	140°F	CHEMICAL	80°F	140°F
Acetic Acid, to 10%	R	C	Hypochlorous Acid, to 5%	C	N	Urine	R	C
Acetic Acid, 10% to 50%	C	N	Jet Fuel	R	-	Vegetable Oil	R	R
Acetone	C	N	Kerosene	R	-	Vinegar	R	C
Alum or Aluminum Sulfate	R	R	Lactic Acid, to 10%	R	C	Water, Fresh	R	R
Ammonium Chloride, Nitrate, Sulfate	R	R	Lactic Acid, above 10%	N	N	Water, Distilled	R	R
Ammonium Hydroxide, to 10%	R	R	Lard	R	R	Water and Sewage	R	R
Ammonium Hydroxide, 10% to 30%	R	C	Lux Liquid	R	R	Xylene	C	N
Aniline	N	N	Magnesium Chloride, Nitrate, Sulfate	R	R	Zinc Chloride, Nitrate, Sulfate	R	R
Aqua Regia	N	N	Malic Acid	N	N			
Barium Chloride, Sulfate	R	R	Methyl Alcohol	C	N			
Beer	R	R	Methyl Ethyl Ketone	N	-			
Benzene	N	N	Methylene Chloride	N	-			
Benzene Sulfonic Acid, 10%	R	C	Milk	R	R			
Benzoic Acid	R	C	Mineral Oil	R	R			
Black Liquor	R	N	Nickel Chloride, Nitrate, Sulfate	R	R			
Bleaching Liquor, to 2%	C	N	Nitric Acid, to 40%	N	N			
Bleaching Liquor, Concentrated	N	N	Oleic Acid	C	N			
Boric Acid	R	R	Oxalic Acid	C	N			
Butyl Acetate	C	N	Perchloroethylene	N	N			
Butyl Alcohol	C	N	Petroleum	R	N			
Butyric Acid	C	N	Phenol, to 5%	C	-			
Calcium Chloride, Nitrate, Sulfate	R	R	Phosphoric Acid	R	C			
Calcium Hydroxide	R	R	Picric Acid, to 5%	C	N			
Calcium Hypochlorite	R	C	Potassium Chloride, Nitrate, Sulfate	R	R			
Chlorine, Dry	C	-	Potassium Hydroxide, to 25%	R	R			
Chlorine, Wet	N	-	Potassium Hydroxide, 25% to 50%	RA	RA			
Chlorine Water	C	-	Sodium Bicarbonate, Carbonate	R	R			
Chloroacetic Acid, to 10%	C	N	Sodium Chloride, Nitrate, Phosphate	R	R			
Chloroform	C	N	Sodium Hydroxide, to 25%	R	R			
Chromic Acid, to 5%	C	N	Sodium Hydroxide, to 50%	R	RA			
Citric Acid, to 10%	R	C	Sodium Hypochlorite, to 6%	R	C			
Copper Chloride, Nitrate, Sulfate	R	R	Sodium Hypochlorite, 6% to 16%	N	N			
Ether	C	N	Sodium Sulfate, Sulfide	R	R			
Ethyl Acetate	N	N	Stannic Chloride	R	N			
Ethyl Alcohol	R	C	Stearic Acid	C	N			
Ethylene Dichloride	N	N	Sugar, Saturated Solution	R	R			
Ethylene Glycol	R	C	Sulfuric Acid, to 10%	R	C			
Fatty Acids	N	N	Sulfuric Acid, 10% to 50%	R	N			
Ferric Chloride, Nitrate, Sulfate	R	C	Sulfuric Acid, above 50%	N	N			
Fluosilicic Acid, 30%	A	A	Sulfurous Acid, to 10%	R	C			
Formaldehyde, to 37%	C	N	Toluene	N	N			
Formic Acid, 10%	R	C	Toluene Sulfonic Acid	R	C			
Grape Juice	C	N	Tomato Juice	C	N			
Hydrobromic Acid, to 20%	R	N	1,1,1-Trichloroethane	N	N			
Hydrochloric Acid, to 37%	C	N	Trisodium Phosphate	R	R			
Hydrofluoric Acid, to 20%	A	A	Turpentine	R	-			
Hydrogen Peroxide	R	-	Urea, to 20%	R	R			

Note - The information presented in the chemical resistance tables is based on judgments derived from laboratory testing and field service performance. The tables have been prepared as a guide to performance. No guarantee of results is made or implied and no liability in connection with this information is assumed. In actual service, floors and walls protected with REGAME OKS60 EPOXY GROUT are subjected to splash and spillage, as well as dilution effects of wash water, mixing with other solutions, wetting and drying cycles, temperature cycling and cleaning procedures. For immersion service, contact for recommendation. The information presented herein should be supplemented by in-service testing. The data furnished in the tables may be revised on the basis of further testing.