RAMCO HARD WORKER

TILE GROUT EPOXY HW211

Two-Component Epoxy Tile Joint Filler

TECHNICAL DATA SHEET

Product Description

Hard Worker Tile Grout Epoxy HW211 is a two-component epoxy-based tile joint grout formulated for interior and exterior floor and wall applications in both dry, wet and submerged areas, with excellent resistance to water, chemicals, stains & abrasion. It ensures long-lasting colour retention, hygienic joints, and minimal maintenance, making it suitable for areas exposed to heavy traffic, frequent cleaning, and aggressive service environments.

Features

- Water resistant
- Chemical and stain resistant
- For external application – UV resistant
- No shrinkage
- Excellent sag resistance
- High mechanical strength
- Resistant to cleaning agents
- Suitable for wet areas and high-traffic environments
- Food grade

Application Areas

Recommended for:

- Bathrooms and wet areas
- Kitchens and commercial food zones
- Hospitals and laboratories
- Swimming pools and submerged applications
- Living rooms, corridors, and walkways
- Industrial areas and patios

Preliminary Checks

Ensure that the tile adhesive or mortar used for fixing tiles has completely hardened and dried before grouting begins. Joints must be clean, free from powder, dust, debris, or excess adhesive and should be raked to at least two-thirds of the tile thickness.

Surface Preparation

The tile surface and joints must be sound, clean, and free from dust, oil, grease, laitance and loose particles. Any adhesive or mortar squeezed into the joints should be removed before grouting. Light wire brushing or cleaning with compressed air may be carried out to remove contaminants. Do not clean the surface using acid cleaners immediately before grouting; if acid cleaning was previously performed, wash thoroughly with clean water and allow the surface to dry. The substrate temperature during application should generally be maintained between 10°C and 35°C.

Mixing Instructions

Pour the entire contents of Part B into Part A and mix thoroughly using a slow-speed drill mixer or suitable mixing tool for approximately 2-3 minutes until a smooth, uniform, lump-free paste is obtained. Scrape the sides and bottom of the container during mixing to ensure complete blending of both components. Do not add water, solvents, or other additives. The mixed material should be used within approximately 60 minutes at 25°C, after which the material will begin to harden.

Application Instructions

Apply the mixed epoxy grout using a rubber float or squeegee, pressing the material firmly into the tile joints to ensure complete filling. Hold the float at an angle and move diagonally across the joints to remove excess grout from the tile surface.

Initial cleaning should be carried out within 20-30 minutes using a damp sponge in circular motion to remove excess grout without disturbing the joints. Use minimal clean water during the cleaning process and change the cleaning water frequently. Final finishing can be carried out using a soft cloth or non-abrasive pad to achieve a clean surface.

Allow the grouted surface to cure adequately before service. Light foot traffic may be permitted after approximately 24 hours, while the area should be allowed to fully cure before exposure to aggressive cleaning chemicals. Avoid chemical cleaning for at least 14 days after application.

Movement Joints

Movement joints, expansion joints, and perimeter joints should not be filled with epoxy grout. These joints must be filled using suitable flexible sealants to accommodate structural movement, particularly in large floor areas or exterior installations.

Cleaning and Finishing

Cleaning should be carried out while the grout is still workable. Excess material should be removed from the tile surface using a damp sponge or suitable cleaning pad. Avoid excessive water during cleaning, as it may affect the appearance of the joints. Final polishing of the tile surface may be carried out using a soft cloth once the grout begins to set.

Technical Properties

Property	Typical Result
Component Appearance	Part A: Viscous Paste Part B: Viscous Liquid
Mixed Material Consistency	Smooth, creamy paste
Pot Life	Max 60 minutes
Sag Resistance	No sag
Trafficable Time	24 hours
Linear Shrinkage	Nil
Water Absorption	Nil
Compressive Strength @ 28 days	85-95 MPa
Flexural Strength @ 28 days	11-12 MPa
Tensile Adhesion Strength	8-9 MPa

All values tested under standard laboratory conditions.

Chemical Resistance Chart

Specific Reagent	Concentration	5 mins	24 hrs	7 days	14 days	28 days	Intermediate Use
			ACIDS				
Acetic Acid	5%	🟢	🟢	🟢	🟢	🟢	🟢
Hydrochloric Acid	10%	🟢	🟢	🟢	🟢	🟢	🟢
Sulfuric Acid	50%	🟢	🟡	🟡	🟡	🟡	🟡
Nitric Acid	50%	🟢	🟡	🔴	🔴	🔴	🟢

Specific Reagent	Concentration	5 mins	24 hrs	7 days	14 days	28 days	Intermediate Use
Phosphoric Acid	80%	●	●	●	●	●	●
Citric Acid	50%	●	●	●	●	●	●
Benzoic Acid	5%	●	●	●	●	●	●
ALKALIS							
Sodium Hydroxide	50%	●	●	●	●	●	●
Ammonia	25%	●	●	●	●	●	●
Potassium Hydroxide	25%	●	●	●	●	●	●
SOLVENTS							
Ethanol	-	●	●	●	●	●	●
FOOD/HOUSEHOLD							
Milk	-	●	●	●	●	●	●
Yogurt	-	●	●	●	●	●	●
Cooking Oils	-	●	●	●	●	●	●
Detergent	-	●	●	●	●	●	●
Coffee	-	●	●	●	●	●	●
Vinegar	-	●	●	●	●	●	●
Sauce	-	●	●	●	●	●	●
Coke	-	●	●	●	●	●	●
Butter	-	●	●	●	●	●	●
Harpic	-	●	●	●	●	●	●
Lizol	-	●	●	●	●	●	●

Package

Hard Worker Tile Grout Epoxy - HW211 is supplied in pre-measured kits of 1 kg and 5 kg, ensuring correct mixing proportions and ease of application on site.

Storage

Store the product in original sealed containers in a dry and shaded environment. Under proper storage conditions, the product has a shelf life of 12 months from the date of manufacture. Protect the material from direct sunlight, excessive heat, and moisture.

Precautions

Avoid application under direct sunlight or extreme temperatures. Ensure that excess grout is cleaned immediately from the tile surface to prevent hardening residues. Do not mix the product with water, solvents, or other additives. Perform a trial application when using natural stones or porous tiles to check for possible staining or absorption.

Health and Safety

The product is non-hazardous under normal usage; however, appropriate personal protective equipment such as gloves, safety goggles, and masks should be used during handling and application. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice if irritation persists. Refer to the Material Safety Data Sheet (MSDS) for detailed safety information.

Technical Support

All values provided are tested under controlled laboratory conditions; performance may vary depending on site conditions and workmanship. For site-specific recommendations, technical data, or detailed guidance, contact the Hard Worker Technical Services Team at:

Toll-free number 1800 202 5700

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