

Duropoxy - 15K

STAIN FREE & GLITTER EPOXY GROUTS



TILE AND STONE
INSTALLATION TECHNOLOGY

DUROPOXY-15K
Will Elevate
YOUR PERSONAL SPACES
With
ELEGANCE & HYGIENIC

www.duroxx.com



Stain-free grout for interior & covered exterior floor & wall



FEATURES / BENEFITS

- Conforms to EN:13888 / ISO:13007-4
- Anti-Bacterial
- Stain-free & Colour-fast
- Food Grade
- Easy to clean
- Chemical and Temperature resistant
- Non-cracking or powdering
- Water and shock resistant.

Application

Designed especially for interior and covered exterior floor and wall joints of all types of ceramic tile, vitreous, semi-vitreous tile, glass mosaic tiles, metal tiles, precast terrazzo, engineered stone floors and natural stones. Recommended for Institutional and commercial kitchens, Cafeterias, residential facilities, Rest rooms, Schools and wet areas like swimming pools, sauna, water bodies and wash rooms.

Substrates

- Ceramic tile
- Vitrified tile
- Glass Mosaic Tiles
- Granite
- Marble
- Metal tiles
- Agglomerates (Engineered Stones)
- Precast Terrazzo tiles

Compliance

ISO 9001:2015



Certificate No. : Q9186414975



Authorized Signature
For HYM International Certifications Pvt. Ltd.

PERFORMANCE PROPERTIES

Duropoxy - 15K

Stain free & Glitter Epoxy Grouts



APPLICATION PROPERTIES

TESTING PROPERTIES	TEST RESULTS
Appearance	Part A-thick coloured paste Part B-thick liquid
Time before grouting	Floor tile installation With normal-setting adhesive: 24 hours With fast-setting adhesive: 4 hours With mortar: 7-10 days Wall tile installation With normal-setting adhesive: 6-8 hours with fast-setting adhesive: 4 hours with mortar: 2-3 days
Mixing ratios	PART A: 100 parts by weight PART B: 8 parts by weight The two parts are pre-batched in their respective containers
Mix consistency	Creamy
Specific gravity of mix	1.55 kg/L
Permitted application temperatures	From +10°C to +35°C
Walk on time	24 hours at T=+23°C
Ready for use	5 days at T=+23°C
Joint width	From 1 to 15 mm

TEST PARAMETERS	REQUIREMENT AS PER IS 17190:2020 Type RG1	TEST RESULT	TEST METHOD
Linear Shrinkage	0.15 % maximum	0.05-0.08 %	IS 17190:2020(Annex-B)
Water Absorption (After 30 min.)	0.5 % maximum	0.07-0.10 %	IS 17190:2020(Annex-C)
Water Absorption (After 240 min.)	---	--	IS 17190:2020(Annex-C)
Compressive Strength	45 MPa minimum	56-58 MPa	IS 17190:2020(Annex-D)
Flexural Strength	30 MPa minimum	37-40 MPa	IS 17190:2020(Annex-D)
Abrasion Resistance	0.5 % maximum	0.35-0.43	IS 17190:2020(Annex-E)
Traverse Deformation	N.A	--	IS 17190:2020(Annex-G)
Chemical Resistance	See Chemical resistance Table		IS 17190:2020(Annex-F)

Remarks:-The RG TYPE Grout mortar, DUROPOXY-15K confirms to IS 17190:2020 Type RG1 with respect to above test results.

PERFORMANCE PROPERTIES

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TEST PARAMETERS	REQUIREMENT AS PER EN 13888(P-1):2022/ ISO13007-4:2013(en)	TEST RESULT	TEST METHOD
Abrasion Resistance	$\leq 250 \text{ mm}^3$	190-220 mm^3	ISO 13007-4:CLAUSE 4.4
Flexural Strength (under standard conditions)	$\geq 30 \text{ N/mm}^2$	36-40 N/mm^2	ISO 13007-4: CLAUSE 4.1.3
Compressive Strength	$\geq 45 \text{ N/mm}^2$	55-60 N/mm^2	ISO 13007-4: CLAUSE 4.1.4
Linear Shrinkage	$< 1.5 \text{ mm/m}$	0.5-0.8 mm/m	ISO 13007-4: CLAUSE 4.3
Water Absorption (After 240min.)	$\leq 0.1 \text{ g}$	0.014-0.050 gm	ISO 13007-4: CLAUSE 4.2
Chemical Resistance	See Chemical resistance Table		ISO 13007-4: CLAUSE 4.6

Remarks:-The RG Type grout mortar, DUROPOXY-15K confirms to EN13888 (P-1):2022/ISO13007-4:2013 (en) with respect to above test.

Chemical Resistance Table

This table summarizes the chemical resistance tests conducted in accordance with UNI EN 12808-1. It outlines the resistance of ceramic tiles treated with DUROPOXY-15K, specifically for use in industrial flooring applications.

Group	Name	Conc. %	Continuous Use				Intermittent Use
			24 hours	7 days	14 days	28 days	
Acids	Acetic Acid	2.5	●	●	●	●	●
		5	●	●	●	●	●
	Hydrochloric Acid	37	●	●	●	●	●
	Citric Acid	10	●	●	●	●	●
	Lactic Acid	2.5	●	●	●	●	●
		5	●	●	●	●	●
		10	●	●	●	●	●
	Nitric Acid	25	●	●	●	●	●
		50	●	●	●	●	●
	Oleic Acid	-	●	●	●	●	●
	Sulphuric Acid	1.5	●	●	●	●	●
		50	●	●	●	●	●
		96	●	●	●	●	●
	Tannic Acid	10	●	●	●	●	●
	Tartanic Acid	10	●	●	●	●	●
	Oxalic Acid	10	●	●	●	●	●

● Excellent Resistance

● Good Resistance

● Poor Resistance

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Chemical Resistance Table

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Group	Name	Conc. %	Continuous Use				Intermittent Use
			24 hours	7 days	14 days	28 days	
Alkalis	Ammonia in solution	25	●	●	●	●	●
	Caustic Soda	50	●	●	●	●	●
	Sodium Hypochlorite Conc. Cl active	>10	●	●	●	●	●
	Caustic Potash	50	●	●	●	●	●
	Sodium Bisulphite	10	●	●	●	●	●
Concentrated solutions 20oc	Iposulphite Sodium	-	●	●	●	●	●
	Calcium Chloride	-	●	●	●	●	●
	Sodium Chloride	-	●	●	●	●	●
	Ferric Chloride	-	●	●	●	●	●
	Sugar	-	●	●	●	●	●
Oils and Fuels	Petrol, Fuels	-	●	●	●	●	●
	Turpentine	-	●	●	●	●	●
	Gas Oil	-	●	●	●	●	●
	Olive Oil	-	●	●	●	●	●
	Lube Oil	-	●	●	●	●	●
Solvents	Acetone	-	●	●	●	●	●
	Enthylene Glycol	-	●	●	●	●	●
	Glycerine	-	●	●	●	●	●
	Ethyl Alcohol	-	●	●	●	●	●
	Solvent Petrol	-	●	●	●	●	●
	PeroxideWater	10	●	●	●	●	●
		25	●	●	●	●	●

● Excellent Resistance ● Good Resistance ● Poor Resistance

Packaging:

DUROPOXY-15K is a factory proportioned kit with Hardener (Part A), Resin (Part B), and colored filler powder (Part C).

1kg, 5kg Bucket container &
10kg cartoon box Packing

Colour:

Choose from range of colours available in Part C filler powder. Please refer the grout colour chart for choosing the colour required.

Coverage:

Please refer the coverage chart as it depends on the tile size, joint width and depth.

Working Properties at 70° F (21° C)

Working properties:

Pot life	45 minutes
Foot traffic	24 hours
Heavy traffic	72 hours

INSTALLATION

Important site Checks: Notes to the specifiers:

- It is recommended to check the colour of the grout, if it is meeting the desired colour of the client
- It is recommended to do a small area with actual tile/stone at site and check for any colour ingress into the tile/stone. Many tiles / stones have high absorption which may lead to discoloration / colour marks.
- DUROPOXY-15K is a solid epoxy grout and does not accommodate movements in tile/stone that can occur due to various reasons. Movements which occur in the tile/stone area due to non provision of movement joints will lead to cracks / breakage of grout joints / tile/ stone.
- Keep the working area covered and protected from Sun light while application of DUROPOXY-15K, stain free epoxy grout, is applied in open areas like swimming pools etc. Keep the cover for 7 days and till the filling of pools with water after the completion of grouting with DUROPOXY-15K stain free epoxy grout.

Surface Preparation:

Before starting to grout, remove debris in grout joints and lightly sponge the tile surface to remove dust and dirt. Do not clean tiles with acid cleaners. In case acid cleaners were used to clean the tiles, ensure to wash the area with plenty of water before commencing grouting. Substrate temperature must be between 60°F (16°C) and 90°F (32°C).

Mixing

Empty entire contents of DUROPOXY-15K Stain free Grout Part "A" and Part "B" container into a clean mixing pail. Mix with a margin trowel or a slow speed drill mixer until liquids

are completely blended. Add at least ¾ of DUROPOXY-15K Part "C" Filler Powder and mix to a uniform consistency. Add the remaining filler powder and mix to achieve a stiff mix to work into the joints.

Immediately pour entire contents of bucket onto working area. Use a plastic sheet as a drop cloth. Use standard epoxy grouting techniques to work with DUROPOXY-15K Epoxy Grout into tile joints. DUROPOXY-15K Epoxy Grout can also be applied with a caulking gun. Be sure all grout joints are packed full. Remove as much excess material as possible before initial cleaning with grout float.

Do not leave excess grout on the face of tiles.

Cleaning

Remove excess grout from the face of the tiles with the edge of the grout float. Hold the float at a 90° angle and pull it diagonally across the joints and tile to avoid pulling out the material.

Initial Cleaning : After 30-45 min of the application of the grout scrub the surface of the tile & joint with clean water and scrubber provided to remove any excess grout. Then take a clean thick white towel and drag across the tile to remove any residue.

Final Cleaning: within 24 hours do a second cleaning with normal soap detergent to remove any haze from the tile

* Contact DUROXZ technical services for large format tile or stone installations on exterior surfaces.

Application

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures >32°F (0°C) and <110°F (43°C).

Limitations

- Light colors may darken slightly from direct UV exposure. Consult with Technical Services for specific exterior grouting recommendations.
- Maximum stain resistance is achieved 10 days after installation. Protect from exposure to acids and strong cleaners during this period.
- Not recommended for soft, polished marble or delicate glazed tiles.

WARRANTY

DUROXZ ITAL CHEMTECH PVT LTD warrants that DUROPOXY-15K Stain free epoxy grout is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of two (2) years from manufacturing of the product subject to the terms and conditions stated in DUROPOXY-15K Product Warranty.