

# DUROPOXY



## Two-component epoxy based grout and tile adhesive



### ■ PROPERTIES

Two-component, solvent-free tile adhesive and grout. Its formula is based on epoxy resins and selected quartz aggregates. Available in 32 colors, similar to the colors of the cementitious grouts of DUROSTICK. Its selected colors ensure perfect color uniformity, without any fading or discoloration over time. Presents excellent resistance to acids, alkalis, strong detergents, most organic solvents and both chlorinated and sea (salt) water. It has excellent workability and high adhesion to the sides of the tiles. It also presents absolute impermeability and resistance to stains. It is non-absorbent and does not favor bacteria growth, thus making it easy to clean, as well perfectly suitable for strict hygiene requirements. Due to its high thixotropy, it is suitable for grouting joint widths from 1-20mm, **without sagging** on vertical surfaces and without air being trapped within its mass.

As adhesive, it is classified R2 per EN 12004, and as grout, it is classified RG per EN 13888.

### ■ ADVANTAGES

- It adheres strongly to the sides of the tiles and does not come off.
- It does not crack. it doesn't crumble and it doesn't split (capillaries).
- Vitrifies grout joints and makes them unaffected by moisture, pollutants, fungi, and bacteria.
- It has high mechanical and chemical resistance.
- The fresh product cleans easily with only water

### ■ APPLICATIONS

DUROPOXY is suitable for horizontal and vertical, interior and exterior applications. Yields unique mechanical and chemical properties when installing but also grouting any type of tile. Necessary in areas such as food industries (meat-fish-vegetable-fruit), slaughterhouses, canning factories, dairy facilities, wineries, chemical laboratories, pharmaceutical companies, medical centers, commercial kitchens, car washes, public restrooms, swimming and athletic pools. It is also ideal for areas with increased humidity level, such as bathrooms and kitchens.

# DUROPOXY



## Two-component epoxy based grout and tile adhesive

Use it to repair deteriorated and worn out cementitious grouts, even in small thicknesses.

### ■ USE

#### 1. Substrate preparation for tile installation - Application

Cementitious application surfaces must be flat, sound, compact, clean, free from loose sections, dust, grease, oils, paint, etc. If necessary, sand using an electric sander with No50 sandpaper. Special applications might require sandblasting. Empty the entire liquid-B component (hardener), into the container with the A component (resin). Mix for about 5 minutes, using a low rpm electric mixer, with the appropriate attachment, until the complete homogenization of the two components. Using a notched trowel, apply the mixed compound on the substrate evenly. Install the tiles in the desired position.

#### 2. Grouting tiles - Application

- **New tile lining:** Remove from the tile surfaces and grout joints any adhesive residues and dust. Fill the joints using a grouting float, by spreading and compacting the product, in a diagonal, to the joints, direction, without leaving any gaps and leftovers.

- **Regrouting over existing cementitious grout:**

Redefine the final color by choosing one of the 38 selected colors of DUROPOXY.

- Using the appropriate tool, the GROUT SCRAPER of DUROSTICK, remove 2-3mm of the existing cementitious grout. Clean the joint(s) from all the dust using a vacuum.

- Using a grouting float, fill the existing joints completely.

- Using a clean and wetted grouting sponge, smooth the new grout and remove the excess material from the tile surface. **The final cleaning of any residues is achieved using a clean and soft grouting sponge, wet only with water.**

### ■ NOTES

- Epoxy systems are sensitive to ambient temperature and humidity, until their final cure. Pot life is reduced with increased ambient temperatures. Dull or discolored spots appear on the surface and curing time increases at high humidity conditions.

- After mixing the two components, the mixture temperature increases.
- Pools with an ambient temperature of +20°C and above can be used after 2 days, while below +20°C, after 4 days.
- For application only in large horizontal surfaces, it can be diluted up to 5% with THINNER 201 of DUROSTICK, giving it better workability.

### ■ SAFETY DIRECTIONS

The product is classified as irritant. It is recommended to keep away from reach of children. Before use, read the cautions on the product packaging or the Safety Data Sheet.

### ■ CONSUMPTION

- **For installation:** approximately 1.75kg/m<sup>2</sup>/mm.
- **For grouting:** 0.2-3.0kg/m<sup>2</sup>, depending on the width and depth of the joint and the tile dimensions.

### CONSUMPTION RATE REFERENCE TABLE FOR GROUTING

TILE SIZE (cm)	JOINT WIDTH (mm)					
	2	3	4	5	7	10
2 x 2 x 0.3	1.020	1.500	-	-	-	-
4.2 x 4.2 x 0.6	980	1.450	1.950	2.600	3.050	4.390
10 x 10 x 0.6	400	600	800	1.020	-	-
15 x 15 x 0.7	310	460	620	790	-	-
20 x 30 x 0.7	200	300	400	500	-	-
30 x 30 x 0.8	180	280	370	450	550	-
40 x 40 x 0.8	0	190	280	350	440	630
50 x 50 x 0.8	0	150	240	310	350	500

The consumption rates refer to gr/m<sup>2</sup>

### ■ STORAGE

Store in dry and shaded places, for 14 months from production date.

### ■ PACKAGING

Carton box with 12pcs of 1kg each one  
(A: 950gr, B: 50gr)  
5kg container (A: 4,750gr, B: 250gr)

# DUROPOXY



## Two-component epoxy based grout and tile adhesive

### CHEMICAL RESISTANCE OF DUROPOXY (ACCORDING TO EN 12808-1)

SUBSTANCE	CONCENTRATION	ABSORPTION %	OBSERVATIONS
Lactic acid	10%	2.6	No effect
Sulphuric acid	10%	3.6	No effect
Sulphuric acid	50%	2.1	Discoloration
Nitric acid	10%	3.1	No effect
Acetic acid	10%	6.4	No effect
Hydrochloric acid	10%	1.9	Slight discoloration
Hydrochloric acid	37%	6.5	Discoloration
Phosphoric acid	10%	2.5	Slight discoloration
Ammonia	10%	2.4	No effect
Sodium hydroxide	10%	1.3	No effect
Hypochlorous sodium	10%	1.6	No effect
Light fuel oil	-	0.5	No effect
Ethanol	15%	1.7	No effect
Ethanol	96%	7.7	No effect
Ethanol + Acetic acid	(15%-3%)	2.6	No effect
MIBK	-	2.1	No effect
Xylene	-	0.9	No effect

Samples were left to dry at room temperature for 10 days.  
Then, they were immersed in the above chemical reagents  
for 30 days at 25°C.

### TECHNICAL SPECIFICATIONS

■ Form - Color	<b>A (RESIN):</b> Thick paste - 32 colors <b>B (HARDENER):</b> Liquid - Honey color
■ Bulk density of mixed product	1.65±0.05kg/lt
■ Mixing ratio A:B	19 parts A : 1 part B
■ Pot life	2 hours at 20°C, 1 hour at 40°C
■ Application temperature	From +10°C to +35°C
■ Temperature resistance	From -40°C to +110°C
■ Foot traffic	After 16 hours at 23°C
■ Shrinkage	Zero
■ Initial shear adhesion strength	≥ 2.0 N/mm <sup>2</sup> EN 12004-2 : 2017 (8.5.3.2)
■ Shear adhesion strength after water immersion	≥ 2.0 N/mm <sup>2</sup> EN 12004-2 : 2017 (8.5.3.3)
■ Shear adhesion strength after thermal shock	≥ 2.0 N/mm <sup>2</sup> EN 12004-2 : 2017 (8.5.3.4)

### MECHANICAL STRENGTH

■ Strength after 28 days, per EN 196-1, in:	
•flexion	30.00 N/mm <sup>2</sup>
•compression	63.50 N/mm <sup>2</sup>

Certified by the GEV institute in the top category  
EMICODE® label EC2 given to products on the verge of  
technological innovation and extremely low percentage of  
volatile emissions. The product complies with the strictest  
environmental and health requirements.

The technical specifications and directions of use contained in this technical data sheet are the results of the knowledge and experience of the company's research and development department, as well as from the real-life applications of the product. The recommendations and suggestions regarding the use of the products are made without guarantee since the respective conditions during their application are beyond the control of the company. For this reason, it is the user's responsibility to make sure that the product is suitable for the intended application as well as the application conditions of the project.

# DUROPOXY



## Two-component epoxy based grout and tile adhesive

DUROPOXY COLOR CHART			
 WHITE No 301	 BLACK No 304	 CARBON No 333	 DARK GRAY No 303
 LIGHT GRAY No 302	 SILVER GRAY No 315	 PARCHMENT No 337	 VIOLET No 324
 AEGEAN No 330	 BLUE No 305	 LIGHT BLUE No 322	 GREEN No 306
 BRICK RED No 310	 TERRACOTTA No 325	 CHOCOLATE No 317	 DARK BROWN No 309
 LIGHT BROWN No 308	 LIGHT BRICK RED No 318	 PEACH No 313	 TOBACCO No 316
 CRONUS No 338	 MAGNOLIA No 321	 SAND No 334	 BAHAMA No 320
 CARAMEL No 335	 CHESTNUT No 336	 IVORY No 312	 ANEMONE No 319
 BEIGE No 307	 OCHRE No 326	 YELLOW No 311	 RED No 329

**DUROSTICK S.A.**,  
MANUFACTURING OF ADHESIVES,  
PAINTS & MORTARS  
**ATHENS:** ASPROPYRGOS, ATTICA, GR: 193 00,  
Tel: +30 211 60 03 500-599, +30 210 55 16 500,  
+30 210 55 98 350, Fax: +30 210 55 99 612  
**THESSALONIKI:** INDUSTRIAL PARK-SINDOS, S.B. 44,  
STREET, DA 10, GR: 570 22,  
Tel: +30 2310 795 797, +30 2310 797 365,  
Fax: +30 2310 797 367  
Email: [info@durostick.com](mailto:info@durostick.com)