

1829 EPOX GRES

EPOXY ENAMEL FOR FLOORS





Description and Use

Two-component epoxy enamel featuring high surface hardness and chemical resistance.

Good resistance to pedestrian traffic and lift trucks with rubber wheels.

It is recommended for use on industrial floors which require resistance to abrasion and to mineral oils, ensuring an antidust effect too.

The product can also be used in external application, if over-painted with PAVIPIÚ code 1943 finish. It can be coloured using the ADVANCE HT tinting system.

Substrate preparation

Suitable substrates:

Industrial concrete floors.

Test carefully the surface to be sure that it is a proper base and structurally healthy.

In the case of new smooth or power floated floors, carry out the treatment after a curing time of at least 4 weeks.

Before the application check the wettability which can be damaged by the presence of water-repellent substances such as oil, silicon, wax or heavy hydrocarbons sometimes used for the polishing.

In this case, surface must be made slightly rough by shot blasting-sand blasting-scarifying; then wash with an acid detergent, followed by rinse using hot water pressure washer and removal of the water with scrubber-dryer equipment. Make sure the substrate is perfectly dry and there is no rising dump; apply a first layer of EPOX GRES already suitably catalysed, diluted 10 ÷ 15% with DILUENTE EPOX code 1612, followed by a second one reduced 5-10%, waiting 8-12 hours between them, up to reach a thickness of about 100 microns dry film.

When the concrete is soiled by oil, adhesives or old flaking paints, rust, efflorescence, mould and other foreign matters, make a shot blasting, remove dust and apply EPOX GRES as above described.

Wherever there are old or chalking floors, take off dust and carry out a soaking-strengthening treatment, then apply the enamel EPOX GRES.



Application

Application method:

- roller
- brush
- airless

Product preparation:

Stir thoroughly the product to achieve even colour and consistency. Then add the hardener INDURITORE PER EPOX code 1871 in the ratio 100:20.

Dilute with 1612 DILUENTE PER EPOX at 5-10% for brush or roller.

Recoating:

within 24 hours

Storage life

Store the containers between + 8°C (47°F) and + 30°C (86°F).

The data are measured at a temperature of 20°C and 65% R.H.

If stored in a cool, dry place, away from sources of heat and sheltered from sunlight, in its sealed original packaging, the product has a shelf life of 24 months. Check the product's shelf life by referring to the production batch number shown on the packaging. The batch number is made of eight numeric characters in which the first four digits identify the year and month of production. Once the product has expired, it must be disposed of in accordance with the current legislation.

Technical features

Colour	see price list		
Appearance of the dry film	semi-glossy		
Gloss	60-70 gloss (Gardner 60°)		
Type of product	two component		
Pot-life	60-90 minutes		
Viscosity **	2500-4000 mPa.s Brookfield rpm 20 s 4		
Practical cover rate *	3-5 m²/kg		
Air drying	30 minutes, dust-free		
	3 ore, touch dry		
	24 hours, through drying		
Allowing foot traffic	after 24-36 hours		
Maximum chemical resistance	after 7 days		
EU limit values for VOC content (Directive 2004/42/EC)	Category A/j: VOC max 500g/l product VOC < 500g/l		
Classification according to standard EN 13501- 1:2018	Reaction to fire classification: class ${\rm B_{fi}}$ with average consumption of 250 g/m²		
	Smoke production classification: s1 with average consumption of 250 g/m²		
AFNOR NF T 36-005 classification	Family I - Category 6b1		
* The yield may vary according to the roughness and absorption of the substrate and in relation to the application system used.			
** May change according to the colour.			



Resistance to cold liquids after 24 hours of contact Tests carried out in compliance with EN 12720:2013

TEST LIQUIDS	DESCRIPTION	EVALUATION OF RESULTS	
-	-	Degree	Description
Ammonia	15% w/w aqueous solution	5	No changes
Sodium hydroxide	50% w/w aqueous solution	5	No changes
Hydrochloric acid	10% w/w solution	4	Slight change
Nitric acid	10% w/w solution	4	Slight change
Sulphuric acid	10% w/w solution	4	Slight change
Citric acid	10% w/w solution	4	Slight change
Acetic acid	10% w/w solution	1	Pronounced change
Formic acid	2.5% w/w solut	1	Pronounced change
Petrol	-	5	No changes
Diesel	-	5	No changes
Brake oil	DOT 4 type oil	4	Slight change
mineral oil	-	5	No changes
Hydrogen peroxide	3% solution	5	No changes
Sodium hypochlorite	5% household bleach	2	Significant change
Balsamic vinegar	Food grade vinegar	1	Significant change
Olive oil	Food grade oil	5	No changes



Warnings

- Do not apply when surface temperature is below + 10°C (50°F) and RH exceeds 3% (carbide test).
- Do not use when environment temperature is below + 10°C (50°F) and above + 30°C (86°F).
- Do not use this product with tinting pastes 1895 4402 GIALLO S GL and 1895 7258 ROSSO S RL.
- The application of such products must be subjected to a careful evaluation of the surface quality by our Technical Assistance Service (relative humidity, substrate absorption and the working typology for which the premises is used).
- · Mix the product during the application.
- · Catalysis must be as precise as possible, using scales to divide the packs.
- In case of application of very saturated shades with oxide pigments, consult the technical assistance for an evaluation of the catalysis ratio.
- Do not use the product after 60-90 minutes from the mixture preparation, otherwise the mechanical features will result damaged and there could be cracks, detachments and stains with different colour shades.
- To obtain higher resistance, protect with finishing PAVIPIÚ, code 1943.
- To give the product an effective resistance to Black Tire Marking, we suggest to overpaint the film with PAVIPIU finishing, cod. 1943.
- · For professional use only.
- · Always read the safety datasheet before use.
- · For use with aluminium pastes, contact the paint mixing service.
- Solvents or thinners used for cleaning tools, as well as any product residues, must not be released into the environment
 or poured down domestic drains. The recipient/product/thinner or cleaning solvent must be disposed of in accordance
 with national regulations.
- · It is recommended to acquire all the material required to finish the work of the same batch.
- The information provided on this technical datasheet is based on our technical and practical knowledge and experience. The technical data refer to the average characteristics of the basic product and are determined under controlled laboratory conditions. The variability of the raw materials available on the market and the tinting of the product can lead to slight deviations in the declared values, in the colour and in the aesthetic effects obtained. It is therefore necessary for the purchaser/user to personally verify, before application, the suitability of the product for the intended use, in particular when different batch numbers of the same material are used in the same work/site.

The above mentioned data are meant to facilitate our customers in the use of our products. IMPA is not responsible for applications of products carried out beyond its direct control. For further technical information about specific systems and/or special applications, please contact our TECHNICAL SERVICE at assistenza.tecnica@impa.it.