



TECHNICAL DATA SHEET

3.1 SOLVENT BASED

► Aliphatic Enamel 2kR (Matt)

Polyurethane acrylic enamel

1087 / Version 6 / 04-03-2025



DESCRIPTION

Acrylic polyurethane enamel cured with very hard aliphatic isocyanate and highly adhesive on a great variety of metallic and non-metallic surfaces.

PROPERTIES

- Does not yellow.
- Excellent colour and shine retention.
- Resistant to the negative effects of weathering.
- Suitable for aggressive environment such as industrial and marine areas.
- High opacity and levelling.
- Good adhesion on difficult surfaces.
- When it is dry to the touch, heating for 20-30 minutes at 70-80° C achieves immediate curing.
- Interior and exterior application.

USES

Especially designed for painting a wide variety of surfaces, both metal (iron, steel, galvanised, brass, aluminium, etc.) and non-metallic (wood, concrete, plaster, etc.) when a quality and resistant finish is required.

TECHNICAL DATA

Appearance	Matt.
Colour	White and colours from Sistema Tintométrico Esencia.
Density at 20°C (Kg/L)	1.15 to 1.35.
Content in solids % volume	48 - 52
Mixing ratio	4:1 by volume, with HARDENDER for 2 kR.
Useful life of mixture	4 h
Gloss (UNE EN ISO 2813)	5% a 60°
Fire Resistance classification (EN13501-1)	A2-s1-d0
Volatile Organic Compounds (COV).	Maximum product content 498,90 g/l
Yield	10 - 13 m ² /l (40-50 microns dry)
Total cure at 20°C (days)	8
Touch dry	2 h
Second coat	minimum 8 h
Thinner	D-30.
% brush or roller dilution	0 - 5
% spray gun dilution	5 - 10

HOW TO APPLY

- Stir the product until totally smooth.
- The surfaces to be painted should be consistent, without any poorly adhered materials and be clean, dry, free of dust, grease, saltpetre, mould, fungus or algae.
- Check the compatibility with the previous paint

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SURFACE AND AMBIENT CONDITIONS

AMBIENT TEMPERATURE:

Do not paint at a temperature of below 10°C .

SURFACE TEMPERATURE:

It should be 2 - 3 °C above dew point when painting.

RELATIVE HUMIDITY:

Never apply with relative humidity exceeding 80%.

AMBIENT CONDITIONS:

The paint should not be applied under conditions of excessive sunlight, strong winds, or if rain is forecast.

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SURFACE PREPARATION

UNPAINTED SURFACES:

Concrete:

- Eliminate high alkalinity and regulate absorption by applying a suitable fixer/primer (See possible application systems)
- Paint using the normal procedure.

Iron and Steel:

- Removal of product residues and foreign substances.
- Sand and apply one or two coats of primer and leave to dry for a minimum of 48 hours.
- Paint using the normal procedure.

Ceramic tiles:

- The tiles must be free of any foreign substances or residues, they must be completely clean, dust-free, and dry.
- It is recommended to use water and soap for cleaning, avoiding cleaners that contain silicone or wax. Clean the tile joints with a brush and ensure that any residue is removed.
- Perform adhesion tests, especially on large tiles (such as porcelain tiles). In case of doubtful adhesion, it is advisable to sand or roughen the tiles and clean off any residue.
- In the first coat, dilute the product according to the porosity and condition of the surface. Apply one or more coats until fully covered, respecting drying times and recoating between layers. It is recommended to apply thin coats and spread the product evenly for good leveling.
- Do not use the product in areas that are constantly submerged, nor on floors or countertops.
- Avoid washing or scrubbing the tiles until at least 8 days have passed since application. Do not use abrasive products or scouring pads that can damage the enamel.

Non-ferrous metals:

- Removal of product residues and foreign substances.
- Paint using the normal procedure.
- Good adhesion on non-ferrous metals, although in the case of aluminium, it is recommended to carry out a previous adhesion test.

Wood:

- Remove any existing mill scale. Get rid of any remains of rust or already rusted material (sand blasting or by scraping and mechanical or manual brushing, see possibility of application of our rust converter if necessary), until the surface is free of rust. Apply 1 or 2 coats of anti-rust primer according to instructions given in the possible application systems.
- It is advisable to apply an anti-rust primer for utmost protection of metal surfaces. (See possible application systems)
- Paint using the normal procedure.

PRE-PAINTED SURFACES IN POOR CONDITION:

Iron and Steel:

- If the enamel-coated surface is not in ideal condition, the existing enamel layer should be removed with PAINT STRIPPER.
- Remove any existing mill scale. Get rid of any remains of rust or already rusted material (sand blasting or by scraping and mechanical or manual brushing, see possibility of application of our rust converter if necessary), until the surface is free of rust. Apply 1 or 2 coats of anti-rust primer according to instructions given in the possible application systems.
- Paint using the normal procedure.

Wood:

- If the enamel-coated surface is not in ideal condition, the existing enamel layer should be removed with PAINT STRIPPER.
- Removal of product residues and foreign substances.
- Sand and apply one or two coats of primer and leave to dry for a minimum of 48 hours.
- Paint using the normal procedure.

Concrete:

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- Elimination of efflorescence and alkalinity by treating with DILUTED ZINC SULPHATE. Regulate absorption by applying a suitable fixer/primer (See possible application systems)
- Paint using the normal procedure.

POSSIBLE APPLICATION SYSTEMS

Use a brush, roller or spray gun for normal application of Aliphatic enamel 2 KR matt. At least two top coats are recommended. The recommended thickness is 40-50 microns dry. Prior to the top coat and depending on the wall apply primer suitable for the yield specified in each case.

PRIMERS:

- Imprex HS: anti-rust epoxy primer with high solids.Yield: 6 - 10 m²/L. Microns: 100
- Imprex Two-component epoxy primer: anti-rust epoxy primer.Yield: 10 - 12 m²/L Microns: 40 - 50
- Imprex RZ: anti-rust epoxy primer for highly corrosive environments.Yield: 11 - 14 m²/L Microns: 50
- Isalnox Multi-adhesive Primer: protection of rust-free metallic surfaces (steel, galvanised steel, aluminium, etc.), sealant for non-metallic surfaces (wood, gypsum, PVC, etc.)Yield: 10 - 12 m²/L. Coats: 1
- Imprex MIO: anti-rust epoxy primer for highly corrosive environments.Yield: 10 - 14 m²/L Microns: 60

FINISH ESMALTE ALIFÁTICO 2KR (MATE):

- Yield: 10 - 13 m²/l (40 - 50 micras secas)
- Coats: 2

SAFETY

Consult the current safety data sheet for safe handling (Section 8.2). Unsuitable for children. Keep out of the reach of children. Do not place painted surfaces into the mouth.

REMOVAL

Take the necessary measures to ensure waste is kept to an absolute minimum. Analyse all possible methods for reuse or recycling, in line with the local and national legislation in force. Take the necessary measures to ensure waste is kept to an absolute minimum. Analyse all possible methods for reuse or recycling. Do not pour down drains or into the environment. Dispose of the product at an authorised waste disposal site or through an authorised waste management company. Waste must be handled, stored and disposed of pursuant to current local- national legislation.

STORAGE

See storage conditions indicated in section 7.2 of the current safety data sheet. Store the containers away from high temperatures, direct exposure to the sun and frost. Maximum recommended storage time: 24 months from manufacture in fully sealed original container, indoors and at temperatures between 5° and 35° C.

LEGAL TEXT NOTE

This information and, in particular, the recommendations regarding the application and final use of the product, are given in good faith, based on the current knowledge and experience of Isaval Paints of the products when they are properly stored, handled and applied, in normal situations, within its useful life, according to the recommendations of Pinturas Isaval. In practice, the possible differences in the materials, supports and actual conditions at the place of application are such that it cannot be inferred from the information in this document, no any other written recommendation, neither any advice offered, will insure the guarantee in terms of marketing or suitability for particular purposes, neither any obligation outside of any legal relationship that may exist. The user of the products must carry out the tests to verify their suitability according to the use they want to give. Pinturas Isaval reserves the right to change the specifications of its products. The property rights of third parties must be respected. All orders are accepted according to the terms of our current General Conditions of Sale and Supply. Users should know and use the latest and updated version of the local Product Data Sheets, a copy of which will be sent to whoever requests them, or can also be obtained on the page www.isaval.es. All data in this document are based on laboratory tests conducted at 20°C and 1 atm pressure. Measurements taken "on-site" may vary due to circumstances beyond our control, such as changes in environmental conditions of pressure and temperature.