



TECHNICAL DATA SHEET & MIXING GUIDE

Paint Zero Matt Emulsion Paint

TDS ref: TDS-PZ-MATTE	Version: 5.0 DRAFT · 25 Sep 2026	Supersedes: TDS_2025 and all earlier versions
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1. Product description

Paint Zero is a matt emulsion paint for interior walls and ceilings, supplied as a dry powder. You mix it with warm tap water to make ready-to-use paint.

Its patented binder (UK patent GB2628101B) is made from plant proteins, starches and gums. It cures as salts and minerals in the formula react with Carbon Dioxide in the air to form a stone-like film.

Paint Zero contains no acrylic, vinyl or other petrochemical-based additives and does not shed plastic particles.

Composition by function (dry powder, % by weight)

Group	%	Ingredients
Plant-based binder	20	Legume proteins, plant starches, acacia gum, rosin
Mixing, flow and application aids	12	Lecithin, cellulose, xanthan gum, sucrose, bentonite clay, silica
Curing and chemistry control	7	Sodium carbonate, calcium hydroxide, sodium gluconate, sodium metasilicate, alum, sodium chloride, sodium citrate, calcium lactate
Minerals and pigments	61	Titanium dioxide (rutile) and Oxide Pigments, calcined China clay, Talc

NOTE: Paint Zero is made without: synthetic polymer binders; in-can preservatives (MIT, CMIT/MIT, BIT, OIT); formaldehyde-releasing preservatives; coalescing solvents and glycols; ammonia; APEO surfactants; PFAS additives; silicone or mineral-oil defoamers; phthalate plasticisers.

2. Uses

Suitable surfaces (interior only)	Gypsum or lime plaster (fully dry), plasterboard, lining paper, and sound, clean, previously painted matt emulsion.
Not suitable for	Exterior surfaces; floors; metal; areas of direct or continuous water contact (e.g. shower enclosures); gloss or oil-based paint unless sanded to a key and primed, with Paint Zero Primer.
Kitchens and bathrooms	Suitable with good ventilation, and away from direct splash zones.

3. Technical data

Property	Value	Method / note
Finish	Matt	Sheen at 85°
Colour	White (plus 50 colours)	Powder is white/off-white; colour develops on mixing
Pack sizes	750 g pouch → 2.5 L paint 75 g sample → 250 ml paint 3kg pouch → 10 L paint	Capsule Collection: 3 × 75 g
Powder bulk density	approx. 0.79 kg/L	A 750 g pouch holds about 0.95 L of powder
Mixed paint density	approx. 1.10 kg/L	750 g powder + 2.0 kg water = 2.75 kg / 2.5 L

Property	Value	Method / note
Volume yield	2.61 × powder volume	0.95 L powder → 2.5 L paint
Spreading rate	10–12 m ² per litre per coat	25–30 m ² per coat from a 750 g pouch; depends on surface porosity and texture
Coats	Two coats recommended	Deep colours or strong colour changes may need a third coat
VOC content	<0.01 g/L (none detected)	ISO 11890-2. EU/UK limit for this category (A/a): 30 g/L
Opacity (contrast ratio)	>98%	ISO 6504-3
Wet scrub resistance	Class: 1- 2 (substrate dependent)	EN ISO 11998, after full cure
Adhesion	4B–5B after full cure	ASTM D3359 (cross-hatch)
Water vapour permeability	Sd 0.005-0.015 for two cured coats	Class V1 High Permeability
Mixed paint pH	9.5-10.5 (with mixing water at 7.0)	Alkaline

4. Mixing guide

Read the precautions (Section 8) before you start. Wear gloves and safety glasses when mixing.

What you need

- A clean paint scuttle or bucket kept for decorating. **Do not use food bowls or kitchen utensils.**
- A drill with a paint-mixer paddle, or a large hand whisk kept for decorating.
- Warm tap water, about 35–40 °C (comfortably hand-warm, Never Hot or Boiling).

Step by step

1. Open a 750 g pouch along the top edge, pour into a clean dry bucket. Pour gently to keep dust down.
2. Fill the empty pouch with warm tap water (35–40 °C). It holds exactly 2 litres.
3. Pour the water steadily onto the powder while mixing with the drill paddle or whisk.
4. Keep mixing until the paint is smooth, with no dry powder or lumps. Scrape the sides and bottom of the bucket.
5. Leave to stand for 5 minutes. The colour and texture develop as the paint rests.
6. Mix briefly again. The paint is now ready to use with ordinary brushes and rollers.

Do not add extra water. Too much water will lower both opacity and coverage. Except, if on new plaster, a 10% extra warm water mist coat is recommended.

Mixing Only What You Need: by weight (most accurate)

Powder	Powder volume (approx.)	Warm water	Paint made	One-coat coverage
750 g (full pouch)	1.5 L	2.0 L	2.5 L	25–30 m ²
375 g (half pouch)	750 ml	1.0 L	1.25 L	12.5–15 m ²
150 g	300 ml	400 ml	500 ml	5–6 m ²
75 g (sample pack)	150 ml	200 ml	250 ml	2.5–3 m ²

Rule of thumb by weight: **water = powder × 2.67** (e.g. 300 g powder + 800 ml water).

Quick Cup Method

Use **1 level cup of powder to 2 cups of warm water**, i.e. 1 cup of powder to 2.1 cups of water. Level the powder off; don't press it down. Use the same cup for both.

Working time and leftovers

- Use mixed paint within 2 days. Keep the bucket well covered between coats.

Longer storage of mixed paint cannot be guaranteed, but may be extended if mixed paint is tightly sealed and clearly labelled in low-temperature (0-5°C) storage conditions and out of reach of children. Allow mixed Paint Zero to naturally reach room temperature and thoroughly mix again before using. Dispose of any sour smelling mixed paint immediately.

- **Unused Paint Zero:** Reseal any unused powder in its pouch and store it dry. It keeps for up to 5 years.

5. Surface preparation

- Surfaces must be clean, dry, sound and free from dust, grease and loose material.
- Brush off dust, wash with dilute detergent, rinse and allow to dry.
- Fill holes and cracks, then sand smooth.
- Lightly sand water-resistant or vinyl wallcoverings and previously painted surfaces before cleaning.
- New plaster must be fully dry, typically a minimum of 5-7 days

6. Application

Tools	Synthetic-bristle brushes and short-pile rollers from a reputable manufacturer.
Conditions	Air and surface temperature 8–25 °C, relative humidity below 80%. Do not apply in direct sun or to cold, damp walls.
Method	Apply evenly and lay off in one direction. Keep a wet edge.
Touch dry	2–4 hours, depending on temperature and humidity.
Recoat	After 4 hours.
Room use	Rooms can be used as soon as the paint is dry. Ventilate as normal.
Full cure	10–14 days. Do not wash or scrub the surface until it has fully cured.

7. Cleaning, storage and disposal

- **Tools:** wipe off excess paint, then wash immediately in a bucket of water. Let solids settle, pour off the water and dispose of the solids with household waste. Do not rinse paint down sinks or drains.
- **Leftover mixed paint:** let it dry, or mix with absorbent material (sawdust or cat litter), wrap and dispose of with household waste where local rules allow.
- **Powder storage:** original pouch, resealed, cool and dry, out of reach of children. Up to 5 years.
- **Packaging:** Pouch certified OK compost HOME (TÜV AUSTRIA), home compost or general waste.

8. Health and safety summary

Dry powder	Warning. H319: Can cause serious eye irritation. EUH208: Contains rosin (colophony). May produce an allergic reaction. Contains soy.
Mixed paint	Not classified as hazardous under GB/EU CLP. Alkaline: avoid contact with eyes.
Protection	Wear safety glasses and gloves when mixing. Avoid breathing dust. Wash hands after use. Keep out of reach of children.
First Aid (eyes)	Rinse cautiously with water for several minutes; remove contact lenses if easy to do. If irritation persists, get medical advice.

See Safety Data Sheet SDS-PZ-MATTE-WHITE (v5.0) for full information.9.

Supplier: Paint Zero Ltd, 12 Keyford Court, Manor Furlong, Frome, Somerset BA11 4BD, UK · info@paintzero.com ·

+44 (0)7344 103604 · paintzero.com

The information in this data sheet is based on laboratory testing and practical experience and is given in good faith. Results depend on surface, conditions and application, which are outside our control. Always test on a small area first. This version supersedes all previous versions.