

PLASTILINE® MMA Cold Plastic Anti-Blackening

Cold plastic hard clear topcoat — 100 % solids MMA | dirt pick-up, blackening & abrasion resistant | roller or wet-in-wet spray

 100 % VOLUME SOLIDS	 0.1–0.3 mm APPLIED FILM THICKNESS	 10 m²/L COVERAGE AT 0.1 mm	 10 MIN POT LIFE AT 20 °C	 100:2 MIX RATIO BY VOLUME
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DESCRIPTION

PLASTILINE® MMA Cold Plastic Anti-Blackening is a low-viscosity, 100 % solids methyl methacrylate (MMA) clear topcoat for cold plastic road and area markings. Supplied as a bluish liquid that dries clear, it cures chemically on addition of PLASTILINE® MMA BP 50 Hardening Powder to form a hard, smooth, self-levelling film.

Applied over cold plastic screeds and markings, it seals the marking surface against dirt pick-up, blackening and abrasion — helping the marking hold its colour, contrast and appearance in service. Solvent-free and low-yellowing, it is applied by roller onto a cured surface, or wet-in-wet by spray into a catalysed but uncured PLASTILINE® MMA base.

INTENDED USES

- Protective clear topcoat over PLASTILINE® MMA cold plastic screeds, sprays and roller markings — roads, highways and intersections.
- Parking areas, loading bays, forecourts and commercial hard-standing where markings are exposed to tyre-scuff blackening.
- Coloured surfacing, cycle lanes, bus lanes and pedestrian areas where colour retention and contrast are important.
- Refurbishment of existing cold plastic markings that have darkened through dirt pick-up.
- Exterior application on asphalt and concrete carrying fast- or slow-moving vehicle and foot traffic.

FEATURES & BENEFITS

Resists dirt pick-up and blackening. A hard, smooth, low-porosity film sheds tyre rubber and road grime, so markings stay brighter and more legible for longer.

Good abrasion resistance. Takes the traffic wear as a sacrificial layer so the marking beneath keeps its colour and profile.

Self-levelling, smooth finish. Flows out to an even film without roller texture — no ridging, no ponding.

100 % solids, solvent-free. No solvent loss on cure — the full applied volume becomes film. 10 m²/L at 0.1 mm.

Low yellowing. Stays clear over the marking, preserving white, yellow and coloured contrast.

Fast chemical cure. Hardening time ranges from approx. 35 minutes at 5 °C to approx. 10 minutes at 30 °C, giving short working windows.

SYSTEM PRODUCTS

- Hardener (Comp. B): PLASTILINE® MMA BP 50 Hardening Powder — ordered separately; dose adjusted to temperature.
- Base markings: the PLASTILINE® MMA cold plastic screed, spray and roller range.
- Application: solvent-resistant 12 mm thick-nap roller onto cured surfaces; spray wet-in-wet into a catalysed, uncured MMA base.
- Cleaning: acetone — tools, equipment and overspill, before cure.

Two application routes. Roller onto cured markings, or wet-in-wet spray into a catalysed, uncured PLASTILINE® MMA base.

Wide temperature window. Applies from 5 °C, with hardener dosed between 1.0 % and 3.0 % to suit prevailing conditions.

TECHNICAL DATA

PHYSICAL & COMPOSITION

Composition	Methyl methacrylate (MMA) reactive cold plastic, two-component.
Components	Comp. A — resin; Comp. B — PLASTILINE® MMA BP 50 Hardening Powder (supplied separately).
Colour	Bluish liquid — dries clear.
Volume solids	100 %
Density	1.0 kg/L
Viscosity	47–63 seconds, Ford Cup 4

MIXING & APPLICATION

Mixing ratio	100:2 by volume (Comp. A : Comp. B). Refer to the Hardener Dosing & Cure Times table — the dose is adjusted to temperature.
Method of application	Solvent-resistant thick-nap roller, 12 mm pile, onto a cured surface; or wet-in-wet spray into a catalysed, uncured PLASTILINE® MMA base.
Number of coats	1
Typical film thickness	0.1–0.3 mm (100–300 g/m ²)
Theoretical coverage	10 m ² /L at 0.1 mm DFT
Application temperature — air	5 °C to 35 °C
Application temperature — substrate	5 °C to 50 °C
Substrate condition	Dry, and at least 3 °C above the dew point.
Pot life	Approx. 10 minutes at 20 °C at 2.0 % hardener — see Hardener Dosing & Cure Times.
Solvent for cleaning	Acetone

PACKAGING & STORAGE

Pack sizes — Comp. A	2 kg, 4 kg, 8 kg
Pack sizes — Comp. B	PLASTILINE® MMA BP 50 Hardening Powder: 10 g, 30 g, 80 g, 100 g, 200 g, 700 g
Shelf life	6 months at 25 °C from date of manufacture, in original unopened packaging.
Storage	Store in original sealed containers in a cool, dry, well-ventilated place, out of direct sunlight and away from heat and ignition sources. Store Comp. B separately from Comp. A.
Tariff code	HS 320820

HARDENER DOSING & CURE TIMES

Temperature	Hardener (% by wt. of Comp. A)	Pot life	Hardening time
5 °C	3.0 %	approx. 13 min	approx. 35 min
10 °C	3.0 %	approx. 11 min	approx. 26 min
20 °C	2.0 %	approx. 10 min	approx. 22 min
30 °C	1.0 %	approx. 8 min	approx. 10 min

Hardener quantity is calculated on the net weight of Comp. A resin only. Temperatures refer to resin, substrate and air together. Values are laboratory-derived; site conditions may cause deviation.

MIXING

- A clear paraffin layer will be present on the resin surface on opening. Incorporate it fully with a mechanical mixer before adding hardener — do not skim or discard it.
- Add the correct quantity of PLASTILINE® MMA BP 50 Hardening Powder for the prevailing temperature (see table above) and mix thoroughly for one minute.
- Weigh the hardener — do not estimate it. An incorrect dose, high or low, is the most common cause of cure failure.
- Mix only the quantity that can be applied within the pot life. Do not re-catalyse, thin or reuse material that has passed its pot life.

SURFACE PREPARATION

- The surface must be dry, clean and free of dirt, dust, grease, oils, chemicals and loose material.
- The substrate must be at least 3 °C above the dew point throughout application and cure.
- Roller application: apply onto a fully cured PLASTILINE® MMA marking or screed.
- Wet-in-wet spray: apply only onto a PLASTILINE® MMA base that has been catalysed but has not yet cured.
- Do not apply over concrete or mortar treated with curing retarders, accelerators, emulsion plasticisers, silane or silicone surface treatments, or over epoxy coatings — these can disturb the cure. Where the substrate history is unknown, apply and assess a test area first.
- Where the existing marking or substrate is in question, consult the SCS technical department before starting work.

APPLICATION

- Apply at 0.1–0.3 mm (100–300 g/m²) in a single coat. The minimum and maximum thickness must be observed — outside this range cure and performance are not assured.
- Roller: use a solvent-resistant thick-nap roller with a 12 mm pile. Lay off evenly and allow the material to self-level.
- Wet-in-wet spray: apply directly into the catalysed, uncured MMA base before it has set.
- Each PLASTILINE® MMA product has different performance and flexibility characteristics. Select the correct base material for the application — do not substitute between products.
- Clean tools and equipment with acetone immediately after use, before the material cures.

Do not: apply outside 5–35 °C air or 5–50 °C substrate temperature, or where the substrate is less than 3 °C above dew point; estimate the hardener dose rather than weighing it against the net weight of Comp. A; apply below 0.1 mm or above 0.3 mm film thickness; apply over epoxy coatings, silane- or silicone-treated surfaces, or concrete treated with retarders, accelerators or emulsion plasticisers without a prior test area; use hardening powders other than PLASTILINE® MMA BP 50; re-catalyse, thin or reuse material that has passed its pot life.

HEALTH & SAFETY

Methyl methacrylate is a flammable liquid with a strong characteristic odour. Keep away from heat, sparks, open flame and other ignition sources; no smoking. Ensure adequate ventilation during mixing and application, and use forced ventilation in enclosed or confined areas. Wear safety clothing, respiratory protection, eye protection and chemical-resistant gloves. PLASTILINE® MMA BP 50 Hardening Powder is an organic peroxide — keep it cool, store it separately from the resin and away from ignition sources, and never combine it directly with accelerators or other chemicals. Refer to the Safety Data Sheets for both components for full PPE, safety, health and environmental information before use. Dispose of product and empty packaging in accordance with local and national requirements.

REGULATORY INFORMATION & DISCLAIMER

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