

PLASTILINE® Thermoplastic HI-SPRAY ULTRA

Thermoplastic PERFORMANCE Modified hydrocarbon spray & extrusion road marking paint

PLASTILINE® Thermoplastic HI-SPRAY ULTRA is a 100% solids, hot applied road marking containing pigments, glass beads, hydrocarbon binder and filler, which when heated becomes liquid and when cooled solidifies to provide an exceptionally durable pavement & road marking. Supplied as a powder in meltable bags.

This petroleum derived formulation is best used for long-line applications and areas subject to fast moving traffic. This formulation is specially formulated for optimal application by spray equipment & extrusion.

Formulated to comply with EN 1436 and EN 1871.

PLASTILINE® Thermoplastic HI-SPRAY ULTRA contains a higher amount of pigment for increased luminance and durability and a higher % of premixed reflective glass beads for sustained retro reflectivity during the wearing life of the marking.

Properties:

- Excellent adhesion to asphalt.
- Excellent adhesion to primed concrete.
- Contains premix beads for maintained retroreflective properties.
- Flexible application thickness.
- Quick drying <less than 2 minutes down to 10°C.
- Formulated for spray & extrusion application.
- Lead-free.
- Extremely environmentally friendly product.
- Supports workers safety.

Technical Data:

Colour	White, yellow, red, black, blue & green. (Other colours available upon request) Colour complies with EN 1871, Table 2
Density (approx.)	1.90 to 2.10 Kg/ Litre (Typical for white & yellow)
Glass Bead Content	40%
Mass Solids	100%
Volume Solids	100%
Titanium Dioxide Content (TiO ₂)	10%
Typical Film Thickness	1.0mm to 3.0mm (Overlaid)
Theoretical Coverage	2 to 6 Kg per m ² - the actual consumption depends on the applied layer thickness, the application technique (extrude or spray) and the type / condition of the surface.
Method of Application	Spray and extrusion
Number of Coats	1 coat
Skid Resistance	45 min (EN 1436 Table 8 Class S1)
Pack Size	25 Kg meltable bags
Retro Reflectivity (mcd/Lux/m ²)	100 min. dry (EN 1436 Class R2)
Application Temperature	190°C to 210°C for Spray 190°C to 200°C for Extrusion
Maximum Temperature	230°C
Specification Compliance	EN 1436 and EN 1871 Standards.
Drying Time	2 mins
Softening Point (°C)	95 min (EN 1871 Table 7 Class SP3)

Road & Line Marking: Thermoplastic

Page 1 of 2

Whilst we endeavour to ensure that all advice we give about the product is correct, the information given in this data sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so entirely at his own risk. As conditions of use, method of application and suitability of the substrate prior to painting are beyond our control, no guarantee is implied by the recommendations contained herein. We therefore do not accept any liability whatsoever or howsoever arising from the performance of this product or for any loss or damage arising out of the use of this product. The information contained in this sheet is liable to modification from time to time in the light of experience and ongoing product development programmes. It is the user's responsibility to ensure that this sheet is current prior to using the product

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02/07/2024
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22/04/2021

Luminance Factor	$\beta \geq 0,80$ (EN1871 Table 6 Exceeds Class LF6) – On white $\beta \geq 0,50$ (EN1871 Table 6 Exceeds Class LF2) – On yellow
Recommended Glass Beads	PLASTILINE® Reflective Glass Beads 125 – 850 MP Coated Glass Beads applied / dropped on at a minimum of 400 gram/m ² immediately after application
Weather Circumstances	Minimum temperature at application - 5°C Maximum temperature at application - 45 °C Maximum relative humidity at application - 90°C
Packaging	Meltable LDPE Bags – 20kg Bags are part of the recipe and are also melted in the thermal cooker
Primers	For concrete & poor asphalt surfaces – PLASTILINE® ThermoPlastic High Penetration Primer should be applied.
Tariff Code	HS38069090

Notes:

*Refer to EN1871.

**Refer to EN1436 Performance for Road Users. (Reflectivity performance subject to correct application and grade of drop on glass beads. Durability of performance subject to traffic conditions and correct application according to guidelines.

Surface Preparation:

The surface must be dry, clean, free of dust, contamination, oils, loose particles, and other impurities. Existing road markings and surface must be checked for load bearing capacity the road marking material to be applied.

If in doubt an adhesion test sample should always be carried out. If required old road marking should be removed prior to application using suitable mechanical methods.

Concrete or Cement Bound Surfaces

Surface components that impair adhesion, such as fine mortar layers, concrete slurries, curing compounds etc. must be removed by suitable mechanical methods such as high-pressure cleaning, grinding or blast cleaning. Concrete or cement bound surfaces should always be primed with **PLASTILINE® ThermoPlastic High Penetration Primer**.

Ensure that the surface is completely wetted with primer to ensure optimal adhesion of the thermoplastic. The consumption of the primer depends entirely on the porosity of the concrete. The primer should have sufficient time for the solvent to evaporate prior to final application of the thermoplastic which is generally around 30 minutes. Generally, once the primed surface is sticky it is ideal for application of thermoplastic.

The moisture of the concrete should not exceed 4% when marking. A minimum 48 hours should be allowed after rain.

Bituminous Surfaces

Loose elements such as grit should be removed. Existing chemical additives on the surface of new bitumen surfaces such as flux oils, oleiferous separating agents for rollers and similar which are detrimental to the adhesion of subsequent coats and can cause discolouration. A test piece of thermoplastic should be applied, if any negative results are obtained the surface should be allowed to weather for an additional 4 to 6 weeks.

For weak or thin bituminous surfaces with lack of bitumen such as chip seal, these surfaces should be primed with **PLASTILINE® ThermoPlastic High Penetration Primer**.

Application:

Suitable for application by screed, spray, or extruder machines. The temperature of the material is adjusted to control the flow for the type of application required. More specifically formulated products are available for screed, profiled or extrusion type markings.