

PLASTILINE® Thermoplastic CITY-SPRAY ULTRA

Thermoplastic PREFORMANCE alkyd spray & extrusion road marking paint

PLASTILINE® Thermoplastic CITY-SPRAY ULTRA is a 100% solids, hot applied road marking containing pigments, glass beads, alkyd 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 synthetic derived formulation can be used for all lines. PLASTILINE® Thermoplastic CITY-SPRAY ULTRA is best suited for slow speed traffic & heavy vehicles like buses & trucks in areas such as city centres, parking lots, bus depots, intersections, pedestrian crossings, traffic symbols or where vehicles tend to "stop", wheels turn & oils can drip onto markings. This product is harder at elevated road temperatures, ensuring high durability.

PLASTILINE® Thermoplastic CITY-SPRAY ULTRA contains a higher amount of pigment for increased luminance & durability. This formulation is specially formulated for optimal application by spray equipment or extrusion box.

Formulated to comply with EN 1436 and EN 1871.

Properties:

- Excellent adhesion to asphalt.
- Excellent adhesion to primed concrete.
- Contains premix beads for maintained retroreflective properties.
- Formulated to provide the highest resistance to dirt, oils & temperature fluctuations.
- Harder at elevated road temperatures, ensuring high durability.
- Flexible application thickness.
- Quick drying <less than 2 minutes down to 10°C.
- Formulated for spray & extrusion application.
- Lead-free.
- 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%
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)
Retro Reflectivity (mcd/Lux/m ²)	200 min. dry (EN 1436 Class R4)
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)	115 min (EN 1871 Table 7 Class SP4)

Road & Line Marking: Thermoplastic

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

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 EXTRA 125-850 MP Coated Glass Beads applied / dropped on at a minimum of 500 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 – 25kg 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 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.