

THERMOPLASTIC ROADMARKING PAINTS
EN 1871:2000
TECHNICAL DATA SHEET (TDS)
WHITE & YELLOW

General

This specification / requirements is covering the purchase of reflective thermoplastic paint for road marking for white and yellow color lines and horizontal traffic signs.

Material

The materials shall comply with the EN 1871:2000 standard – Road marking materials physical properties.

Technical Characteristics

Characteristic, EN 1871:	White	Yellow
Chromatic coordinates - 4.2.1.1	Table 2-White	Table 2-Yellow
Class of luminance Factor β , 4.2.2.1 -Table 5	LF4($\beta \geq 0,70$)	LF1($\beta \geq 0,40$)
Softening Point,4.2.1.2 - Table 6	SP3($(\geq 95^{\circ}\text{C})$)	SP3($(\geq 95^{\circ}\text{C})$)
Cold Impact,4.2.1.4 - Table 7	CI2	CI2
UV Aging,4.2.1.5-Luminance Factor-Table 3	UV1($(\Delta\beta \leq 0,05)$)	UV1($(\Delta\beta \leq 0,05)$)
UV Aging,4.2.1.5-Chromaticity Coordinates-Table 2	Table 2-White	Table 2-Yellow
Heat Stability,4.2.3.1- Chromaticity Coordinates - Table 2	Table 2-White	Table 2-Yellow
Heat Stability,4.2.3.2 - Softening Point	$\Delta SP \leq \pm 10^{\circ}\text{C}$	$\Delta SP \leq \pm 10^{\circ}\text{C}$
Weather Resistant,4.2.2.4 - Table 9	TW2(2,5 – 5,0)	TW2(2,5 – 5,0)
Weather Resistant(after UV aging) 4.2.3.6 - Table 10	TWU1(0 to 0.5)	TWU1(0 to 0.5)

Additional to the above requirements the offered thermoplastic paint shall appear the below properties / performance, in use that are designated in EN 1436:2007 +A1 Road Marking Materials – Road Marking Performance for road Users:

TYPICAL THERMOPLASTIC PAINT SPECIFICATION
(CONTRACTOR IS FREE TO PROPOSE ALTERNATIVES FOR CONSIDERATION)

Characteristic, Relative Paragraph of EN 1436:	White	Yellow
Luminance coefficient under diffuse illumination in dry conditions 4.2.2 Table 1	Q3 (Qd ≥ 130)	Q2(Qd ≥ 100)
Retroreflection under vehicle headlamp illumination, Dry road Markings, 4.3, Table 3	R4(RL ≥ 200)	R3(RL ≥ 150)
Chromatic coordinates, 4.4, Table 6.	Table 6-White	Table 6-Yellow class Y1
Skid Resistance.4.5, Table 7	S2(SRT ≥ 45)	S2(SRT ≥ 45)

Composition of the thermoplastic paint
The pigment, the glass bead the filler shall be uniformly spread in the resin and complies to the below Table:-

Composition of the thermoplastic paint % per mass			
Component	White	Yellow	Red
Binder	18.0 min	18.0 min	18.0 min
Glass Beads – According the EN 1424:1997/A1:2003	30-40	30-40	30-40
Calcium Carbonate and inert Fillers	42 max	42 max	42 max
Titanium Dioxide – According to ASTM D476 Type II(Rutile)	10.0 min	-----	-----

The granulometry of the glass beads that are spread in the thermoplastic paints shall be as per below Table:

Sieves ISO 565:1990 R 40/3 - μm	Cumulative retained mass (%)
710	0-2
600	0-10
355	30-70
212	70-100
125	95-100

The maximum acceptable of faulty glass beads shall be 20% per weight.
The reflective coefficient shall be above 1.5.

NOTES AND REVISIONS

All stated dimensions must be verified on site. Lobs Design must be advised of any discrepancies.
This drawing must be read together with the specification/Bill of Quantities and related drawings.

This drawing is for the purpose of obtaining Planning & Building Regulations Approval only. Should the contractor use them to build from then they assume full responsibility for the design.

REV	DESCRIPTION	DRWN	CHKD	DATE
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Client
Highacre (Cambridge) Ltd
Land Adjacent to Gosmore Nursing Home, Hitchin Road, SG4 7QH

Project
Proposed New Terrace of 3 No. Two Bed Cottages

Drawing Title
Planning Condition 11 Hitchin Road Road Marking Specification

Scale	Date Feb 2024	Drawn KRL	Checked
Project No LD614A	Drawing No PC11.02	Revision	



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