CRYSTALITE

Preform Thermoplastic Product Data Sheet

Product Description:
Crystalite Preform Thermoplastic is a high performance roadmarking system designed to meet and exceed AS4049.

Some limestone aggregates are supplemented with a high proportion of angular quartz. The intermixed quartz will ensure that skid resistance is maintained through-out the serviceable life of the marking.

Surface applied "Thermo Mix", which is a proprietary blend of class C glass bead/quartz or bead/crushed glass grit mixture shall be applied immediately after heating whilst the thermoplastic material is still liquid. The mixture should fully cover the surface of the thermoplastic. Approx 1 kg per sq mtr is required.

Application:

The pavement markings shall be applied in accordance with the requirements of road authority specifications with the following special provisions.

Pavement surface preparation

All surfaces must be clean, dry and free of oil and loose material. Silt deposits should be removed and primed.

Wet surfaces should be allowed to dry for 24 hours, (concrete for 48 hours). Asphalt and spray seals can be flame dried however pitting may occur due to steam release when applying thermoplastic (service life of marking is not affected).

Thermoplastics should not be applied to surfaces that are subject to movement eg cement paving blocks.

Loose gravel will destroy any roadmarking including thermoplastics.

1. Concrete -
   New surfaces finished with steel trowel or older polished concrete areas should be shot blasted or mechanically ground.
   All concrete surfaces should be primed according to the instructions. Silicon based concrete curing compounds may cause delamination. Concrete should have cured for at least 30 days. Concrete should be dry for 2 days after rain.

2. Asphalt –
   Primer is usually not required, but may be used to improve adhesion over old polished or dried out asphalt and where silt deposits have been removed.

3. Spray Seals -
   Bleeding seals will cause blackening as tar may be deposited by vehicles to the surface of the marking. If tar bleeding occurs through the thermo on installation, reduce the heat of application.

Method of application

1. Ensure the pavement surface is prepared as detailed above.
2. Place all sheets as numbered per diagram.
3. Check placement and alignment of marking before applying heat.
4. Heat uniformly; work in strips no wider than 450mm, wider sections should be heated in multiple passes. The correct temperature is reached when the flame shows orange tips, the preform bubbles and the edges "flow-in".
5. Apply Thermo-Mix to surface by throwing about 20cm behind flame where the plastic is still molten. Some of the material will sink into the molten thermoplastic, the surface should be fully covered with the mix.
6. Check coverage of the surface applied Thermo-Mix, if the surface of the thermoplastic shows shiny or smooth areas, there is not enough mix applied. Any missed areas can be rectified by reheating and sprinkling on more mix..

Application notes

1. A bucket is ideal for applying the thermo-Mix by throwing like fertilizer.
2. A garden water sprayer with a fine mist will accelerate cooling after heating is completed.
3. Sweep up any excess mix from around marking before opening to traffic.
4. If tar spotting in the marking occurs on a spray seal, use slightly less heat.
5. Adhesion should be checked at the edge of the marking with a screwdriver, if delamination occurs, reheating is required.
6. If the lane is narrow, gaps between words can be reduced to fit.

The use of 45kg gas cylinders is recommended, smaller cylinders are prone to icing which reduces the output of gas.

On site training is available by arrangement.

24 hour telephone technical advice available on 0428 235 858

Physical & Chemistry Properties:

Item	Standard
Luminance	>80%
Binder Content	20%
Specific gravity（g/cm3）	2
Glass Bead Content	25%
Refractive index	≥1.5
Spherical beads (%)	>80

Storage:

Store at room temperature.
Store in a dry place

Store out of direct sunlight once out of packaging. Sunlight exposure can cause a burning / browning affect when heating the material.

Shelf Life is optimum <6 months, however has been successfully applied at over <5 years.

Packaging:
Recyclable cardboard packaging with ability to reopen / close partially used packs.
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