

TECHNICAL INFORMATION  
**SWARCOTHERM COLOURTEX**



# SWARCOTHERM COLOURTEX

<b>1</b>	<b>Main Characteristics .....</b>	<b>3</b>
<b>2</b>	<b>Packaging and Storage.....</b>	<b>3</b>
<b>3</b>	<b>Technical Information .....</b>	<b>3</b>
3.1	Physical Properties.....	3
3.2	Binder Specification.....	3
3.3	Aggregate .....	3
3.4	Material Performance .....	4
<b>4</b>	<b>Surface Preparation .....</b>	<b>4</b>
4.1	Suitability of Road Surface .....	4
4.2	Preparation of the Road Surface.....	4
<b>5</b>	<b>Application .....</b>	<b>4</b>
5.1	Weather Conditions .....	4
5.2	Installation.....	4
<b>6</b>	<b>Certifications.....</b>	<b>5</b>

**Important Information:**

Please consider our General Terms and Conditions and the general notes of the Technical Information Sheet! No liability is accepted for any errors! The information is provided to our best knowledge and experience. This information is, however, no warranty for any properties of the material. We provide this information without obligation, also regarding the rights of third parties. The user has to make sure that the material is appropriate for the respective application.

## 1 Main Characteristics

- Coloured thermoplastic surfacing with high skid resistance levels
- Suitable for both old and brand new asphaltic surfaces
- Can repair and regulate existing minor surface defects
- Rapid curing times, typically 20 minutes
- Tough and durable material, with heavy metal-free pigments
- Can be laid all year round

## 2 Packaging and Storage

SWARCOTHERM COLOURTEX is supplied in meltable polyethylene bags of approximately 25kg each. They are packed onto pallets of 50 bags, and supplied in lots of approximately 1.25 tonne per pallet. Finished pallets are shrouded and stretch-wrapped for protection. It is recommended that SWARCOTHERM COLOURTEX products should be kept totally dry and stored away from direct sunlight and areas of potential contamination.

## 3 Technical Information

### 3.1 Physical Properties

Relative density	2.00 ± 0.1 g/cm <sup>2</sup>
Installation - road temperature range	0-40 °C
Material application temperature	180-210 °C
Maximum safe heating temperature	230 °C
Cooling time (open to traffic) at 20°C	Typically 15-20 mins

### 3.2 Binder Specification

Property	Test Method	Specification
Softening point °C	BS 2000 Part 58:1988	100 ± 5 °C
Flow resistance	BS 2499 Part 3: 1993 (Mod.)	No flow
Flexibility	ASTM D3583 (Mod.)	No surface cracking or crazing

### 3.3 Aggregate

SWARCOTHERM COLOURTEX uses 100% granite or basalt aggregate.

Product	Green/Blue	Red
Polished Stone Value (PSV)	63+	55+
Aggregate Abrasion Value (AAV)	1.4	1.4

### 3.4 Material Performance

The properties of the installed product are designed to conform to the requirements below.

Property	Typical Value
Skid Resistance Value (SRV)	65+
Initial texture depth	1.5mm
Spread rates	90 - 100 m <sup>2</sup> per tonne (10-11.1 kg/m <sup>2</sup> )

## 4 Surface Preparation

### 4.1 Suitability of Road Surface

The System is deemed suitable for use on Highways with bituminous surfaces with macrotexture depths of between 0.5 mm and 2.0 mm, measured using the Sand Patch Test as defined in BS EN 13036-1: 2002 or BS 598 -105 : 2000.

### 4.2 Preparation of the Road Surface

The areas to which the System is to be applied shall be clearly defined and marked by the Purchaser on the existing road surface prior to commencement of work on-site. Any imperfections in the road surface not acceptable to the Installer shall be reinstated with a material approved by the Purchaser in consultation with the Installer.

The road surface shall be clean, dry and free from ice, frost, loose aggregate, oil, grease, road salt and other loose matter which may impair adhesion of the System. Where the road surface does not comply with Section 4.1 it shall either be cleaned by the Installer or others, by grit blasting, high pressure water jetting, low pressure water/abrasive blast cleaning, scarifying, scabbling or other means approved by the Purchaser. To remove dust and other loose matter the road surface should be vigorously brushed or treated with hot compressed air. Any oil visible on the road surface shall be removed by washing and scrubbing with a suitable detergent solution followed by flushing with clean water or by other suitable means.

Existing Road markings, ironwork, road edges of area to be treated and road studs shall be suitably masked.

## 5 Application

### 5.1 Weather Conditions

Installation of the System shall only be carried out at a road surface temperature of 0°C to 35°C. Ambient and road surface temperatures shall be recorded at the start and if the weather is variable during the installation process. Road surfaces shall be dry before and during the installation of the System.

### 5.2 Installation

The material shall be melted and mixed in a suitable pre-heater fitted with a vertically or horizontally mounted agitator, so designed to lift the material from the pre-heater base to prevent separation within the system. The required amount of material shall be loaded into the pre-heater, the temperature of the material raised to the application temperature range of

180°C – 210°C and mixed until fully homogenous. The time taken to prepare the material for application is 45 – 75 minutes depending on the capacity of the mixer.

The heating of the material shall be monitored by observation of the thermometer in the pre-heater. When the correct temperature has been reached, this shall be checked using a long handled digital probe accurate to  $\pm 2^{\circ}\text{C}$ . The maximum safe heating temperature range is between 210°C and 230°C.

The material can be maintained at the maximum application temperature of 200°C for up to four hours, with constant agitation without causing serious degradation or discolouration. The hot-melt material shall be discharged into a bucket and transferred to a clean, uncontaminated screed box.

The material shall be applied to the prepared road surface using a screed box typically between 200mm to 600mm wide with a suitably designed trailing edge to give an applied finish thickness of between 3 - 5 mm by combing transversely across the road surface, allowing the aggregate to be evenly distributed providing a well textured finish free of excessive lumps and similar surface blemishes.

On a road surface with an average texture depth of 1.5 mm the coverage rate of the material shall be between 10 – 11.1 kg/m<sup>2</sup>, (90 - 100m<sup>2</sup> /tonne). This coverage rate may need to be increased on a more rugous surface.

Any masking tape used shall be removed during the application procedure, whilst the material is still hot.

## 6 Certifications

The management system of SWARCO HITEX LTD has been assessed and registered as meeting the requirements of BS EN ISO 9001 and BS EN ISO 14001.