

# TECHNICAL DATA SHEET

# **T 14 ESL**

# **EPOXY SELF SMOOTHING FLOORING (1 mm)**

Epoxy self smooth flooring is a high gloss, epoxy resin based floor finish applied between 0.5 - 1.0 mm thickness. It combines outstanding wearing properties with chemical resistance and decorative finish. Ideally suited in situations where a seamless, joint free finish is required and maximum cleanliness is essential.

# RECOMMENDED USAGE

T 14 ESL is suitable for environments that can benefit from the tough chemically resistant system. Typical areas such as

- · Laboratories and clean rooms
- · Pharmaceutical manufacturing
- · Food and beverage production
- Warehouses and storage areas
- · General light industry

# **TEHNICAL DATA**

Pot life : 30 mins

Initial Hardness : 24 hour Full cure : 7 days

Bond strength : >1.5 N/mm

BS 6319 (P2) : >50 N/mm Flexural strenth : >25 N/mm

BS 6319 (P3)

Tensile strent : 20 N/mm

BS 6319 (P2)

Shore D hardness : >70

# **Drying Times**

(H: Hour, D: Day)		25°C	40°C
Set to Touch		1H	2H
Dry Hard		8H	6Н
Over coating Interval with recommended topcoats	Min.	6Н	4H
	Max.	Extended*	Extended*

<sup>\*</sup>Ensure sanding with 220 emery before over-coating

# **SURFACE PREPARATION**

Ensure removal of all dirt, grease and loosely bond or flaking material from the surface.

**TITAN PAINTS AND CHEMICALS LIMITED** 



# TECHNICAL DATA SHEET COVERAGE ESTIMATES

Pack Size	14.5 kg	16.5 kg
Thickness	0.5 mm	1.0 mm
Resin (Part A)	5 kg	5 kg
Hardener (Part B)	2 kg	2 kg
Filler ( Part –B)	7kg	9kg
Pigment (Part D)	500 g	500 g
Coverage (approx.)	19.0 m²	10.5 m²
Mixed Density	1.53g/cc	1.57g/cc

#### **APPLICATION INSTRUCTIONS**

Installation of T 14 ESL should be carried out by an approved applicator of TITAN PAINTS

# **Surface Preparation**

Note: The substrate should have a surface tensile strength of at least 1.5 N/mm<sup>2</sup>.

It is essential that T 14 ESL is applied to sound, clean and dry surfaces to ensure maximum adhesion. The ideal substrate for application is a flat, lightly textured and clean surface. Surface irregularities must be ground down or filled out with TITAN PAINTS range of repair materials.

Note: Any joints in the base e.g. movement joints, should be brought through to the finished surface and suitably sealed.

#### **Concrete Floors**

New concrete floors must be allowed to cure for at least 28 days and shall have an effective damp-proof membrane below to prevent rising dampness. The concrete substrate must be hard, sound, free of dust and other barrier materials such as mortar, curing agents, laitance, oil, grease, etc. that will inhibit adhesion to the substrate. Overwatered or otherwise weak concrete surfaces must also be suitably prepared down to sound, solid concrete by mechanical methods. Dust and other debris should be removed using vacuum equipment.

The ideal substrate for application is a flat, lightly textured, clean concrete surface. Surface irregularities must be ground down or filled out with TITAN PAINTS range of repair materials. Concrete surfaces should be mechanically prepared, either by grinding, contained shot blasting or similar, and be vacuum cleaned.

**Note:** The surface moisture content should be less than 5% before commencement of the work. The coating should not be applied to floors that are known to have rising moisture. The product should not be applied in temperatures less than 10°C or where the ambient relative humidity is greater than 85%.

# **Epoxy Screeds/Underlay**

The surface of the epoxy screed/underlay should be cleaned free of dust or any other contaminants that could inhibit the adhesion. Any surface irregularities must be ground down or filled out with EP 305 (epoxy repair compound).

#### Primino

Priming is not necessary when T 14 ESL is laid on epoxy screed / underlay. All concrete floors to be installed with T 14 ESL must first be primed with T 14 ESL. One or more coats of the primer

may be required depending upon the condition and porosity of the concrete substrate. High porosity substrates may be revealed after preparation and will be evident by their rapid suction and absorption. Poorly primed surfaces may lead to blistering or pin holing in the cured resin. Allow for overnight drying

#### Mixing

The individual contents of T 14 ESL should be thoroughly stirred before being mixed together. Mix Part D with Part A and ensure smooth mixing. The entire contents should be poured in to a larger mixing vessel to incorporate Part B and Part C. The materials are mixed thoroughly with a spiral mixing paddle in a slow speed drill for 3 minutes until a consistent homogenous mix is achieved. One or more packs may be mixed simultaneously to ensure a quick rate of installation.



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**Note:** Once mixed, T 14 ESL will generate heat and lose working time if it is left in the mixing container or otherwise kept in bulk.

# **Application**

The mixed T 14 ESL material should be applied to the prepared surface without delay using a trowel or depth set rake to achieve the desired thickness. As soon as the T 14 ESL has been laid and as work progresses, the surface should be gently rolled with a spiked roller in order to release any entrapped air from the mix and also to blend out any trowel marks. The work area should be protected during the installation process and during the initial curing time to ensure that no debris can contaminate the surface, as this will lead to unwanted blemishes in the hardened, cured surface.

#### **CLEANING**

T 14 ESL can be removed from tools and equipment by using RTC 100 immediately after use. Any hardened material will need to be removed mechanically.

# **MAINTENANCE**

Good housekeeping and regular cleaning is essential in order to maintain the performance of T 14 ESL. It is particularly important in areas that are subject to regular spillage of chemicals. Spillages should not be allowed to dry, which results in higher concentrations of the chemicals, causing early failure. Regular cleaning of the surface with a rotary scrubbing machine in conjunction with a water miscible cleaning agent or hot water

washing at temperatures up to 50 C is recommended.

# STORAGE AND SHELF LIFE

T 14 ESL has a shelf life of 12 months if kept in a dry, clean store between 5°C and 30°C in the original unopened containers. The product should be protected from frost, away from direct sunlight and sources of heat.

#### **PRECAUTIONS**

During mixing and application the following precautions should be observed: Ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin. Avoid contact with the hands by wearing protective gloves and by using, if necessary, a suitable barrier cream. In case of contact with the eyes, rinse immediately with

#### **DISPOSAL/SPILLAGE**

Spillage of any of the product components should be absorbed onto sand or other inert materials and transferred to a suitable disposable vessel. Disposal of such spillage or empty packaging should be in accordance with local waste disposal authority regulations.

For further information please refer to the Material Safety Data Sheet.

# **CONDITIONS OF SALE**

Sold subject to the Company's conditions of sale which are available on request.

#### NOTE

The information supplied in this datasheetis based upon extensive experience and is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

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# STORAGE AND TRANSPORTATION

Do not store or transport the containers under direct sunlight or at elevated temperatures or near fire ignition sources. Store the container in an upright position in order to avoid any leakage or damage.

Shelf Life: 12 Months for Epoxy Primer Part A and Part B from the date of manufacturing in the original tightly closed containers stored away from direct sunlight and excessive heat.

All information mentioned in this data sheet are based on tests conducted at laboratory conditions. Results may vary depending upon the atmospheric condition, application methodologies and substrates.