

**1. DESCRIPTION**

**IMPA TUFF - FLOOR** is a two-component solvent blend of epoxy resin and polyamine adducts. The product is air drying and is a high performance, high solid, and two coat floor system for concrete substrates.

**2. APPLICATION AREAS**

May be used on both floor and wall areas.

- Schools
- Shopping areas
- Parking facilities
- Industrial floors and aggressive environments
- Hospitals
- Food processing

**3. ADVANTAGES**

- Seamless and hygienic
- Good resistance to chemicals
- Available in range of colours
- Excellent protective qualities
- Can be used on a variety of substrates
- Gloss finish, easy to clean
- High impact resistance
- Excellent **flow** and **leveling** properties

**4. SURFACE PREPARATION**

**CONCRETE** – Surfaces must be clean and mechanically sound and free of laitance, nibs, dust, grease and oil. Wet abrasive grinding is generally used on concrete floors. Any hole's imperfections should be patch with **Impa Epoxy Grout**. Concrete substrate must have a minimum tensile strength of 1.5N/mm<sup>2</sup>. This should be left overnight to cure and shall then be rendered smooth. For a smooth final finish, the surface profile, peak to valley, should not exceed 25% of the coating thickness. If the surface is very irregular, consideration should be given to the use of **Impa Epoxy Self Levelling Primer**.

**HIGH PERFORMANCE FINISHES**

**IMPA TUFF – FLOOR EPOXY**

ISSUED DATE: AUG 2016 REV 3

**TECHNICAL DATA**

<i>Product Code</i>	<i>EP502 Base &amp; EP501 Activator</i>
<i>Colour</i>	<i>Base: White and standard colours Activator: Pale Translucent</i>
<i>Pot Life</i>	<i>90 min @ 23°C</i>
<i>Appearance</i>	<i>High Gloss</i>
<i>Shelf life</i>	<i>24 Months</i>
<i>Packaging</i>	<i>5L</i>
<i>Flashpoint</i>	<i>38°C</i>
<i>Viscosity</i>	<i>Mixed:100 – 105KU /23°C</i>
<i>S.G (weight)</i>	<i>1.33 – 1.36kg/L</i>
<i>Solids per volume</i>	<i>63-64%</i>
<i>Solids per mass</i>	<i>59 – 60%</i>
<i>Practical Spreading rate (depending on porosity)</i>	<i>7 -8m<sup>2</sup>/L per coat @50µm</i>
<i>Recommended finishing coats.</i>	<i>2minimum</i>
<b>DRYING TIME</b>	
<i>Touch dry time</i>	<i>4 - 5 Hours at 23°C</i>
<i>Recoating Time</i>	<i>16 - 48 Hours at 23°C</i>
<i>Full cure</i>	<i>3 - 4 Days</i>
<b>APPLICATION</b>	
<i>Roller &amp; Brush</i>	<i>Ready for use</i>
<i>Mixing Ratio</i>	<i>4 Base: 1 Activator by Volume</i>
<i>Cleaning</i>	<i>IMPA Epoxy THINNERS</i>
<i>Mixing</i>	<i>IMPA Epoxy THINNERS if needed</i>

## 5. PRIMING

For use over a concrete / plastered substrate. **Impa Tuff Floor Sealer/Primer or Impa Aqua Epoxy** MUST be used to ensure maximum product performance

Over coating of the primer with **Impa Tuff – Floor Epoxy** should comply with the over coating time requirements laid down for the specific primer. The over coating time for **Impa Aqua Epoxy** is 4-6 hours and **Impa Tuff Floor Clear Sealer** is 16hours.

## 6. APPLICATION

### PRECAUTIONARY NOTE

**Prevailing weather conditions** must be taken into account otherwise surface defects can occur.

Overcoat times of 48 hours maximum must be adhered to at all stages. See our literature on “Non – slip floor finishes”

### MIXING

Under no circumstances are the supplied kits to be split. The contents of the components in a kit are to be thoroughly mixed before use. Empty entire contents of the activator into the base component. Mix thoroughly for 2 minutes with an impeller fitted to a variable speed drill. Transfer mixed material into another mixing container, scraping the sides and bottom of the container and remix for another 2 minutes. This step is critical to ensure complete cross-linking of components is achieved. Do not mix by hand. Avoid high speed mixing that will entrain air into the mix.

### APPLICATION

**Impa Tuff – Floor Epoxy** should be applied by first pouring a bead of material in the form of a ribbon on the surface to be coated. Do not leave material in the container too long because it will set faster thus reducing the work life. Using a 2mm serrated trowel, spread the applied material at the specified rate. Apply as evenly as is possible, working from left to right, and then back. Approximately 10 minutes after application, roll using a porcupine roller to aid in excess air release. All over-coating times must be strictly adhered to. **Impa Tuff – Floor Epoxy** will not cure if applied at below 10°C

### CURING

The surface of **Impa Tuff -Floor Epoxy** will be tack-free in 4 to 5 hours at 23°C. The coated area may be put back in service in 48 hours dependant on the floor temperature . Ultimate physical and chemical characteristics will be achieved in 7 days.

## 7. PRECAUTIONS

In order to limit minor colour variations from batch to batch, it is advisable to use product from the same batch on large open areas. Batches may be factory blended on request.

- Application should be avoided in cold and moist weather conditions.
- **Do Not** apply the product at surface temperatures below 6°C (minimum of 2°C above dew point) and temperatures above 40°C
- **Do Not** apply if ambient temperature is less than 10°C or more than 40°C.
- **Do Not** apply if relative humidity temperature is less than 10°C or more than 85. °C
- Extremely cold conditions will make the drying time longer.
- Paint in area where there is good ventilation.
- Ensure that recommended mixing ratio is adhered to
- Discard any mixed material left over from the previous day

- **HARDENER** reacts readily with moisture. **Do not** expose to high humidity. Keep containers tightly sealed when not in use.
- **HARDENER** contains isocyanate – use suitable respirator, particularly during spray application of the mixed material.
- Take care with surface preparation

#### **NON-SLIP SURFACE**

A non-slip surface can be achieved by applying a clear **bond coat** of **Impa Tuff Floor Clean Sealer** onto the relevant cured pigmented **Impa Tuff – Floor Epoxy base coat** at an approximate rate of 3m<sup>2</sup>/L and broadcasting into this a suitable grit at the rate of approximately 1.5Kg/m<sup>2</sup>. Ensure that grit application is evenly broadcast and back-rolled using a short mohair fibre roller. The selected aggregate should be applied to the coating when it is still wet, and should be scattered over the surface to completely cover the surface.

The quality of the finish depends upon the skill of the applicator at this stage.

#### **Environmental Health & Safety Information**

**DANGER! CONTAINS SULFAMIC ACID. CAN BURN EYES AND SKIN. SEVERELY HARMFUL IF SWALLOWED. HARMFUL IF INHALED. AVOID BREATHING IN DUST, MIST OR VAPORS. USE ONLY IN A WELL VENTILATED AREA. MAY CAUSE COUGHING, WHEEZING, THROAT IRRITATION, SHORTNESS OF BREATH, HEADACHE, NAUSEA OR VOMITING. DO NOT MIX CONTENTS WITH CHLORINE BLEACH OR ANY OTHER CLEANING PRODUCT OR DETERGENT. TO DO SO MAY EXPOSE YOU TO DANGEROUS GASES. MIX ONLY IN PLASTIC CONTAINERS.**

Wear protective clothing, eyegoggles and acid resistant rubber gloves and footwear. Avoid contact with eyes and skin. **FIRST AID: If Swallowed:** Do not induce vomiting. Have victim drink lots of milk or water if conscious. Get medical attention immediately! **Eye and Skin Contact:** Flush immediately with plenty of water for at least 15 minutes; spread eyelids and occasionally flush underneath them. **Get medical attention immediately!**

Remove contaminated clothing and shoes immediately. Wash contaminated clothing before reuse. If experiencing Respiratory Discomfort (e.g., throat irritation, coughing, wheezing): Remove victim to fresh air. Get medical attention immediately!

**CAUTION: KEEP OUT OF REACH OF CHILDREN AND ANIMALS - DO NOT TAKE INTERNALLY.**

Refer to Material Safety Data Sheet for additional health and safety information.

**IN CASE OF FIRE:** Use foam, CO<sub>2</sub>, dry chemical, or water fog.

**SPILL** – Absorb with inert material and dispose of as specified under **Thinning/Clean-up**.

#### **DISCLAIMER**

*The technical information contained in this document are given in good faith and are meant to be used as a guideline by the specifier or user. Whilst we are confident about the quality of our products, we cannot accept any liability for the incorrect use or application of our products. Surface preparation forms an integral part of the scope of works and it is expected that the highest standards are maintained during surface preparation and application, to ensure that our products perform as intended. Always ensure to use the same product batch numbers, refrain from doing spot touch-ups and paint surfaces from corner to corner to prevent colour and sheen variance. As technology may change over time we reserve the right to change products to keep up with changes in raw materials or product trends without pre notice. Although we will always prevail to keep clients informed about changes to be made, but cannot bind ourselves to such notes Please ensure the use of the latest Technical Data Sheet.*

**Please note :** that all our latest Product Data Sheets and Material Safety Data Sheets are available for viewing on our website at [www.impa.co.za](http://www.impa.co.za). All information listed is owned or used under licence of Impa Paints and its related companies. © 2010 Lurama 149 (Pty) Ltd. All rights is reserved.