

<p><b>1. DESCRIPTION</b></p> <p><b>IMPA COAL TAR EPOXY</b> Coal is a two-component solvent-borne, polyamide cured epoxy tar, modified designed to bond to most materials (concrete, steel, fiberglass, wood, etc.). High strength and resistant to most corrosive reagents. This epoxy features the superior water resistance of coal tar epoxies and has the mild “tar” odour and is black in colour. Flexibility exceeds that of normal epoxies.</p>	<p>HIGH PERFORMANCE FINISHES</p> <p><b>IMPA COAL TAR EPOXY</b></p> <p>ISSUED DATE: JUNE 2014 REV 1</p>													
<p><b>2. APPLICATION AREAS</b> Protective coating for :</p> <ul style="list-style-type: none"> <li>• Marine structures</li> <li>• Tanks</li> <li>• Waste Water facilities</li> <li>• Broadcast coating for industrial traffic</li> <li>• Traffic wear-course in parking garages</li> <li>• Primer/sealer/topcoat for degreased concrete</li> </ul> <p><b>3. FEATURES</b></p> <ul style="list-style-type: none"> <li>• High-quality epoxy tar for corrosion protection of most surfaces.</li> <li>• Use in tidal zone for protection of concrete and steel</li> <li>• Brown colour indicator where multi-coat system required.</li> <li>• Economical</li> <li>• Excellent chemical resistance</li> <li>• Low viscosity</li> <li>• Non-blushing &amp; non-water spotting</li> <li>• Bonds to cold damp concrete</li> <li>• More flexibility than regular epoxies.</li> <li>• Do not use on shutter boards</li> </ul> <p><b>4. SURFACE PREPARATION</b> Any surface must be clean, mechanically sound and dry. For porous surfaces, electronic moisture content tests must be conducted prior to application of the priming system. Maximum moisture 4-5% max. (e.g. Protimeter Survey Master or equivalent) <b>Steel</b> - Surfaces must be free of all rust and mill scale should be abrasive blasted to a minimum standard of Sa 2, 5 of Swedish Code of Practice SIS 055900. If immersion service is contemplated then a standard of Sa 3 should be attained. Anchor pattern must never exceed 100µm and preferably should be in the 50 - 75µm range.</p>	<p><b>TECHNICAL DATA</b></p> <table border="1"> <tr> <td data-bbox="754 763 1114 1039"> <i>Product Code</i>  <i>Colour</i>  <i>Pot life</i> <i>Appearance</i> <i>Shelf life</i> <i>Packaging</i> <i>Flashpoint</i> </td> <td data-bbox="1114 763 1540 1039">                     BASE EP402                      Activator EP 401                      Base: Black                      Activator: Grey                      8 hours @ 23°C                      Gloss                      24 Months                      5L                      23°C                 </td> </tr> <tr> <td data-bbox="754 1039 1114 1167"> <i>Viscosity</i> <i>S.G (weight)</i> <i>Solids per volume</i> <i>Solids per mass</i> </td> <td data-bbox="1114 1039 1540 1167">                     Mixed:100 – 105KU /25°C                      1.33 – 1.36kg/L                      63-64%                      59 – 60%                 </td> </tr> <tr> <td data-bbox="754 1167 1114 1256"> <i>Practical Spreading rate (depending on porosity)</i> <i>Recommended finishing coats.</i> </td> <td data-bbox="1114 1167 1540 1256">                     3-4m<sup>2</sup>/L per coat @120µm DFT                      2minimum                 </td> </tr> <tr> <td colspan="2" data-bbox="754 1256 1540 1469" style="text-align: center;"> <p><b>DRYING TIME</b></p> <p><i>Touch dry time</i> <i>Recoating Time</i> <i>Full cure</i></p> </td> </tr> <tr> <td colspan="2" data-bbox="754 1469 1540 1666" style="text-align: center;"> <p><b>APPLICATION</b></p> <p><i>Roller &amp; Brush</i> <i>Mixing Ratio</i></p> </td> </tr> <tr> <td data-bbox="754 1666 1114 1774"> <i>Cleaning</i> <i>Mixing</i> </td> <td data-bbox="1114 1666 1540 1774">                     IMPA Epoxy THINNERS                      IMPA Epoxy THINNERS if needed                 </td> </tr> </table>		<i>Product Code</i>  <i>Colour</i>  <i>Pot life</i> <i>Appearance</i> <i>Shelf life</i> <i>Packaging</i> <i>Flashpoint</i>	BASE EP402 Activator EP 401 Base: Black Activator: Grey 8 hours @ 23°C Gloss 24 Months 5L 23°C	<i>Viscosity</i> <i>S.G (weight)</i> <i>Solids per volume</i> <i>Solids per mass</i>	Mixed:100 – 105KU /25°C 1.33 – 1.36kg/L 63-64% 59 – 60%	<i>Practical Spreading rate (depending on porosity)</i> <i>Recommended finishing coats.</i>	3-4m <sup>2</sup> /L per coat @120µm DFT 2minimum	<p><b>DRYING TIME</b></p> <p><i>Touch dry time</i> <i>Recoating Time</i> <i>Full cure</i></p>		<p><b>APPLICATION</b></p> <p><i>Roller &amp; Brush</i> <i>Mixing Ratio</i></p>		<i>Cleaning</i> <i>Mixing</i>	IMPA Epoxy THINNERS IMPA Epoxy THINNERS if needed
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**Galvanised Steel** - Galvanised steel must be completely free of any trace of greasy matter and should be completely free of any trace of greasy matter and should be scrubbed with abrasive pad or proprietary abrasive cleaner until completely "non-greasy". The cleaned surface must be well washed with clean water and allowed to dry.

**Concrete** - Concrete must be free of laitance, curing membranes and shutter release oil. All blow-holes, omegas and other similar defects must be opened up and the best method of preparation is a light abrasive blast. If a smooth surface is desired, any major surface blemished should be patched and smoothen with **IMPA COAL TAR EPOXY**, with overcoating following within 48hours.

**Timber** - Timber must be clean and should be reasonably smooth. All debris from preparation must be removed before any coating commences. Do not use on shutter boards as tar stains concrete.

### 5. BONDING/PRIMING

It is recommended that **IMPA COAL TAR EPOXY** be applied directly to the prepared substrate. It must NEVER be applied over conventional primers. If there is to be a delay in coating prepared steel, it is possible that solvent based metal etch primer may be used but advice of **IMPA's Technical Department** should always be sought.

### 6. APPLICATION

Thoroughly stir Part B (black curing agent) before combining with Part A (epoxy base) due to pigment settling. Mix Coal Tar epoxy base with the Coal Tar curing agent. The mixing ratio is 2/1 (base/curing agent) by volume or 2/0.87 by weight. **IMPA COAL TAR EPOXY** does not require a 'sweat-in' or induction time (induction time is typical of lesser quality epoxies). The mixed components should be used immediately. Pot life is approximately 25-40 minutes at 23°C, so mix only the amount of epoxy that can be easily applied within that time limit. Thin **with IMPA EPOXY THINNERS** if necessary or if using as a concrete sealer. Apply by roller or brush. Typical application thickness by roller is 10 mils.

**IMPA COAL TAR EPOXY** should always be applied as a minimum 2-coat system and for most uses a 3-coat system is necessary. The first coat of a system may be thinned up to 10% with **IMPA EPOXY THINNERS**. Application should preferably be brush **IMPA COAL TAR EPOXY** may be airless sprayed, normally through a 400-500µm tip and up to 10% thinning is permissible **IMPA COAL TAR EPOXY** should not be applied if the ambient temperature is below 10°C. The curing reaction will not proceed at low temperature. If the surface are not at least 2°C above the dew point there is every chance that a film of condensed moisture may be present. This will adversely affect adhesion of the coating. Wet film thickness should not exceed the recommended figures as solvent entrapment could result. The same condition may be caused if overcoating times are shortened. Solvent entrapment in the film can lead to many problems. When work is carried out in full sun, and surface temperature may rise far above ambient, it will be found that the film will remain thermoplastic until full cross-linking of the coating has taken place. \*While cross-linking of the coating is normally complete in seven days it is advisable to leave the coating as long as possible (up to 28 days) before putting it into full immersion service.

### 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 moist weather conditions.
- Extremely cold conditions will make the drying time longer.
- Paint in area where there is good ventilation.
- **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
- Ensure that recommended mixing ratio is adhered to
- Discard any mixed material left over from the previous day

**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, CO2, 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.