

# EDEN BITUCANE 1K

Pure Bitumen Emulsion Waterproofing Membrane

## PRODUCT DESCRIPTION

EDEN BITUCANE 1K is a refined bitumen emulsion enhanced with strong elastomeric properties used for durable waterproofing of below grade concrete structures such as basement, foundations, retaining wall surface e.t.c. EDEN BITUCANE 1K is a single component high quality viscous liquid that can be applied by roller, or brush and can also be used as a primer prior to the application of bituminous felt membrane. Once cured, EDEN BITUCANE 1K forms a black joint less, flexible and durable coating. Thanks to its excellent adhesion ability EDEN BITUCANE 1K can be applied over a wide range of substrate with ease. Its quick curing time makes its application quick and efficient.

## SPECIAL FEATURES

- ✚ Resistant to water penetration.
- ✚ It can be applied to green concrete
- ✚ Superb resistant to sulphates and ground salts
- ✚ Suitable for use on below ground structures.
- ✚ Ease of application
- ✚ Its mechanical properties remain unchanged within a temperature various of (-20°C to +90°C)
- ✚ Superb adhesion properties
- ✚ Fast curing.
- ✚ Equipped with the most recent jointless technology formulations.
- ✚ Water Resistant
- ✚ Frost Resistant.
- ✚ Provides excellent crack-bridging properties.
- ✚ Good thermal resistance, remains hardened once cured.
- ✚ Unaffected by domestic chemicals such as detergents.
- ✚ Features quick and easy fix of mechanically damages locally within minutes.
- ✚ Cold applied membrane technology.
- ✚ Does not support bacterial and Fungal growth

## WHERE TO USE

EDEN BITUCANE 1K is suitable for application in the following areas:

- ✚ Foundation wall Waterproofing
- ✚ Waterproofing of Retaining Walls and Basements
- ✚ Waterproofing Under-tile in Bathrooms, Terraces, and Roof top areas etc.
- ✚ Roofs and ceiling deck with inverted insulation Waterproofing
- ✚ Waterproofing of Asphalt- and Bitumen-felts,
- ✚ Pile and Pile cap waterproofing etc.

## APPLICATION PROCEDURE

### Stage-1: SURFACE PREPARATION & INVESTIGATIONS

#### A - Pre Substrate Investigation

- ✚ To further ensure durability and efficiency of membrane performance, substrate should possess a minimum compressive strength of at least 25MPa, and a cohesive bond strength of at least 1.5MPa.
- ✚ Check substrate for the presence of old loose coatings, dirt, fats, oils, organic substances, existing membranes and dust. In any case of the existence of the above listed, adequate surface preparatory measures should be employed such as surface grinding by means of a grinding machine.
- ✚ Ensure new concrete structures is cured for at least 28 days.
- ✚ All visible surface irregularities and indentations need to be smoothed and evened out using EDEN reprofiling range of mortars

#### B - Surface Preparation

- ✚ Careful surface preparation is essential for optimum finish and durability thus, surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. In order to achieve this, concrete surface must be mechanically profiled and prepared by shot blasting, sandblasting, water-jetting, scarifying, diamond-grinding or other engineering-approved method.
- ✚ Reference international concrete restoration institute (ICRI) CONCRETE SURFACE PROFILE (CSP) #3 standard for acceptable profile height. Maximum moisture content should not exceed 5%.

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### C - Post Substrate Preparation Investigation

- ✚ Any uneven or visibly loose pieces needs to be chipped off and perfected using EDEN reprofiling range of mortars to achieved an excellent smooth finish.
- ✚ Thoroughly remove any evidence of grinding dust Observe.

### Stage-2: APPLICATION

#### A - Priming

Apply EDEN BITUCANE 1K to prepared substrate by roller or brush in one coat and allow to dry. EDEN BITUCANE 1K is used as a primer for its self and the first coat applied is generally classified as the primer application. Upon curing, some uneven balance may be observed due to the uneven smoothness of substrate, this will be properly coated upon completion of the minimum two coat application process. Allow primer coat to cure for at least 3 – 6 hours or once tacky and note that the curing rate may be affected by the prevailing weather condition.

#### B - Application

Apply EDEN BITUCANE 1K to prepared substrate by roller or brush and ensure entire surface is uniformly coated leaving no puddle until entire surface is covered. A minimum of two coat is recommended while taking note of faintly applied areas for immediate additional coating. Any visible signs of entrapped air can be released by use of a spiked roller. Gradual spread over substrate to minimize/avoid air entrapment is highly recommended.

#### Trouble areas

Trouble areas such as wall- to-floor connections, 90° degree angles, chimneys, pipes/pipe openings, waterspouts (siphon), duct, drainage, etc should be reinforced using a fabric material. Apply EDEN BITUCANE 1K to the rightly sized fabric material to be used, ensuring it is fully saturated, then press in and dress the now soaked fabric material to the problem area.

#### Re-coat

Re-coat substrate once cured within 4 – 8 hours or tacky.

#### C - Curing

EDEN BITUCANE 1K is fast curing but will experience

accelerated curing under direct sunlight. Generally, final curing time is within 6 – 12 hours and in unfavourable conditions without direct sunlight up to 24 - 48 hours may be required.

### RECOMMENDATION:

#### Before Use

It is recommended that product is stirred well before using for at least 2-3 min. Check product seal to ensure it is unbroken or fake. Consult customer support should any concern arise for clarity and Technical support.

#### General

- ✚ Generally, the use of a reinforcing fabric material is recommended for better membrane strength where necessary.
- ✚ Use 5-10cm stripe overlapping when using fibre material over very wide areas that would require joining.
- ✚ Re-coat After 4-24 hours (maximum), multiple layer coating gives strength to the membrane when finally cured.
- ✚ Apply multiple coat at demanding/troubled areas. A minimum of 3 coating is recommended.
- ✚ In a case where EDEN BITUCANE 1K is to be covered with ceramic tiles or similar material with similar application process, oven-dry silica sand (corn-size 0.3-0.8mm) should be applied to saturate EDEN BITUCANE 1K with the last coating layer application while still wet. This saturation will create an adhesion bridge to the tile adhesive that will follow.

### THEORITICAL COVERAGE

Undiluted theoretical Coverage of approximately 2m<sup>2</sup>/ litre / coat, (in addition to the primer coat) depending on the nature of the surface being treated can be adopted as a guide for estimation. An application rate minimum of 1litre per m<sup>2</sup> (in addition to the primer coat) can be adopted if diluted.

### CAUSION

- ✚ Protect EDEN BITUCANE 1K membrane once cured from direct sunlight by using a suitable protection sheet or a cement screed or fibre cement board for floors.
- ✚ Do not over coating/puddling with EDEN BITUCANE 1K paints as the paint film may crack upon exposure to sunlight.



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- ✚ EDEN BITUCANE 1K is recommended for use only as described in the Uses section of this data sheet.
- ✚ Be careful to observe written instruction on all technical documents for this product such as *Safety Data Sheet, Method Statement Data Sheet, Technical Data Sheet, and Test Certificate Results.*
- ✚ Application in cooler temperatures may require extra curing time before the installation of additional coverings.

### TECHNICAL PROPERTIES

<i>Packaging</i>	5kg, 20kg	<i>bucket</i>
<i>Shelf life</i>	12 months minimum from date of production	<i>if stored properly in original, unopened and undamaged sealed packaging.</i>
<i>Appearance</i>	Black slurry	<i>Viscous</i>
<i>Solid content by weight</i>	~ 80 %	
<i>Density</i>	~1.7 kg/l	
<i>Tensile strength</i>	>5N/mm <sup>2</sup>	<i>ASTM D 412</i>
<i>Bonding strength</i>	>2N/mm <sup>2</sup>	<i>ASTM D 412</i>
<i>Permeability to Water Vapor</i>	Nil penetration	<i>ASTM E 96</i>
<i>Elongation at break</i>	400 - 600%	

### APPLICATION INFORMATION

<i>Cure Time at 25°C</i>	Full cure after 7 to 12 hrs	<i>Dependent on application rate, effective sunlight accessed to the area and puddle concentrations.</i>
<i>Re-coat time</i>	4 to 8 hrs	
<i>Minimum Time To Re-coat @ 25°C</i>	4-5 hrs	<i>Depending on application rate and style</i>
<i>Maximum Time To Re-coat @ 25°C</i>	24 hrs	<i>Depending on application rate and style</i>
<i>Storage condition</i>	Store in dry conditions in original packaging at temperatures between +5 °C and +30 °C.	<i>Protect from direct sunlight and frost</i>
<i>Drying Time</i>	@ 25°C	<i>Touch dry (2 - 3 hrs)</i> <i>Walk on dry (20 - 24 hrs)</i> <i>Full cure dry (5 - 7 days)</i>
<i>Ambient Air Temp</i>	+8 °C min. / +40 °C max.	

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### BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

### ECOLOGY HEALTH AND SAFETY

Information on the safe handling, storage and disposal of chemical products, user is advised to refer to the most recent/updated *Safety Data Sheet*, *Method Statement Data Sheet*, and *Technical Data Sheet*, containing physical, ecological, toxicological and other safety/handling/storage related data.

### CLEAN UP

Wash hands and tools with EDEN super cleaner or any of EDEN recommended cleaning products promptly before the material hardens. Cured material must be mechanically removed.

### TECHNICAL SUPPORT

AISE-OHIS *EDEN CONSTRUCTION (CHEMICAL) Ltd* provides a technical advisory service supported by a team of specialists in the field.

### STORAGE AND SHELF LIFE

- ✚ EDEN BITUCANE 1K can be stored 12 months minimum from date of production if stored properly in original, unopened and undamaged / sealed packaging.
- ✚ EDEN BITUCANE 1K is supplied in 5kg, & 20kg buckets.
- ✚ Storage area should be free from moisture and direct sunlight.
- ✚ Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, and batch number and application precaution labels.

### STANDARD COMPLIANCE

Conforms to the requirements of SCAQMD rule 1168.  
Meets moisture vapour permeability requirements of NZS 3604:2011.

### HEALTH & SAFETY

- ✚ Please ensure that hand gloves and goggles are worn during installation
- ✚ Apply in ventilated areas, away from flames
- ✚ It is only important that during application and after application, standard safety procedures are done.
- ✚ Please consult current MSDS for product.
- ✚ For Professional Use only.

### ADDITIONAL INFORMATION

AISE-OHIS *EDEN CONSTRUCTION (CHEMICAL) Ltd* manufactures a complete range of construction chemical products which include:

- ✚ Cementitious Waterproofing membrane
- ✚ Acrylic Waterproofing membrane
- ✚ Polyurethane Waterproofing membrane
- ✚ Bituminous Waterproofing membrane
- ✚ Flooring solution
- ✚ Damp-Proofing products
- ✚ Repair and refurbishment systems
- ✚ Water-stop
- ✚ Cleaning agent
- ✚ Bonding agent
- ✚ Decorative / Repair mortars
- ✚ Tile adhesive and grouts

For more information on any of our products, please contact AISE-OHIS *EDEN CONSTRUCTION (CHEMICAL)* global or regional office.

### LEGAL NOTE

Details contained in this Technical Data Sheet is provided in good will based on the experience and knowledge of the products been stored, handled and applied properly under normal conditions. That client will be responsible to duly follow all instruction written herein. However, Whilst Aise-Ohis *Eden Construction (Chemicals)* Limited endeavors to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it. Therefore, user is mandated to check/test product's suitability for the intended application and purpose. Aise-Ohis *Eden Construction (Chemicals)* Limited reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

