Multi-Use Tile Adhesive Modifying Bonding Latex



## **PRODUCT DESCRIPTION**

EDEN TILE GUM LATEX is a refined High-grade viscous acrylic emulsion bonding agent/admixture for use in improving adhesion strength of tile adhesive for laying small to large format tiles. It is a specially formulated water-resistant latex employed for use to compensate inadequacy of tile adhesives bonding and adhesion strength. It further supplies added waterproofing effected to mixtures used thanks to its carefully researched polymer complimentary & modification technology. It also helps to increased tensile, flexural and bond strengths, magnitude resistance to water and hydrolysis. The particles of EDEN TILE GUM LATEX bind to form continuous films and strands, which stitch the opposite sides of the voids together thereby blocking all spaces, and increasing strength and resistance to water penetration.

#### **SPECIAL FEATURES**

- 4 Aids faster self curing of adhesive under tiles.
- Prevents bleeding
- Improves screed material (Sand & Cement) for better performance when adhering to substrate and tiles.
- Improves tile on tile bonding.
- Proven record of performance
- Earlier hardening
- Lowers water-cement ratio
- Improves water resistance.
- Compatible with all cement types.
- **4** Suitable for interior and exterior applications.
- **4** Reduce dry shrinkage adversely.
- Improve crack resistance.
- **4** Excellent adhesion to a wide range of substrates.
- Increased durability and toughness and abrasion resistance.
- Helps to bond old and new concrete together
- Non-toxic
- Similar thermal expansion and modulus properties to concrete (unlike resin mortars and primers).

#### WHERE TO USE

EDEN TILE GUM LATEX is suitable for application in the following areas:

- Used in modifying Sand cement screed tile underlayment.
- Best fit for used in dry and lay tiling where accelerated strength gain and hardening is required.
- Can be used to improve mortars/Tile adhesive and grout adhesion strength to a variety of substrate such as wood, metals, concrete, screed,

cementitious waterproofing membrane.

- It is suitable for use in cement-based coatings, toppings, patches, levelling compound, stucco, terrazzo and mortar.
- It can be used on above or below grade, internal or exterior cementitious surfaces.
- Direct Tile on tile Bonding and to new and old concrete or masonry surfaces,
- Can modify tile adhesive/gum used in bedding tiles,
- Can be used in improving cement when used as a grouting material.

#### **APPLICATION PROCEDURE**

#### Stage-1: SURFACE PREPARATION & INVESTIGATIONS

#### A - Pre Substrate Investigation

- To further ensure durability and efficiency of membrane / concreting 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 smoothened and evened out using EDEN reprofiling range of mortars

#### **B** - Surface Preparation

4 Careful surface preparation is essential for



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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/concrete. In order to achieve this, concrete surface must be mechanically profiled and prepared by shot blasting, sandblasting, water-jetting, scarifying, diamond-grinding or other engineeringapproved method.

## **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 Observed.

## Stage 2 – (Mixing)

Take care to thoroughly premix the sand/aggregate or gravel with the cement then add EDEN TILE GUM LATEX to the mix while stirring slowly.

- As a Tile Adhesive Modifier: 0.5 liter of EDEN TILE GUM LATEX for every 10Kg of Tile Adhesive.
- As a Tile Screed Modifier: 1.5 2% the weight of Cement.

## Stage 3 (Application)

# As a Tile Adhesive Modifier

- Apply the now thoroughly mixed EDEN TILE GUM LATEX onto the prepared substrate.
- Ensure entire surface is uniformly coated leaving no air entrapments while applying a thin layer of the mixed slurry should be applied onto the surface.
- To ensure no voids occur and full coverage of adhesive is achieved, tile should be pressed into adhesive giving twisting front and back sliding motion.
- In order to compensate for uneven surfaces or tiles or uneven thickness, in addition to applying adhesive on substrate, the rear of the tiles should be applied with EDEN TILE GUM 100 X.
- Product should not be applied under active rain



pour.

#### As a Tile Screed Modifier

- In order to obtain a smooth consistency of mortar, the cement and sand must be dry mixed first.
- Dose EDEN TILE GUM LATEX while mixing, spreading all round to ensure a thorough and homogenous mix.

#### **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

- Immediately before priming, the concrete substrate should be thoroughly dampened with water and any excess being brushed off.
- Re-coat as observed when required and tacky as multiple layer or higher coating thickness would produce higher strength when finally cured.

## CAUSION

- **4** Ensure container used for mixing are clean and dry.
- Use of wet aggregate may result in excessive workability.
- Variation in cement used and workability can give increased strengths.
- Protect EDEN LATEX from direct sunlight
- EDEN LATEX 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 and in higher temperature can experience accelerated curing.

## **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.



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# **TECHNICAL PROPERTIES**

Packaging	5kg, 20kg	Concealed unit
Shelf life	12 months minimum from date of production	if stored properly inoriginal, unopened and undamaged sealed packaging.
Appearance	Whitish liquid	Viscous
Solid content by weight	~ 45 %	
Spg	~1	
Compressive strength	≥17MPa @ 3days	ASTM C109 (Observing good concreting practice)
Tensile strength	≥3.0MPa @ 7days	ASTM C190 (Observing good concreting practice)
Substrate Temperature	+5 °C min. / +35 °C max	
Bond strength	3.7MPa	ASTM C-882)
pН	5.5 - 6.5	
Chloride content	Nill	

# APPLICATION INFORMATION

Initial bond strength time	15-20 minutes	Dependent on application rate, effective sunlight accessed to the area and puddle concentrations.
Initial bond strength temp	25⁰C - 30ºC.	
Storage condition	Store in dry conditions in original packaging at temperatures between +5 °C and +30 °C.	Protect from direct sunlight and frost
Mixing Methodology	Mechanical	
Application Tools	Brush or Trowel or as appropriate	
Ambient Air Temp	+5 °C min. / +40 °C max.	

## **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.

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.



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## **STORAGE AND SHELF LIFE**

- EDEN LATEX can be stored 12 months minimum from date of production if stored properly in original, unopened and undamaged / sealed packaging.
- **EDEN LATEX** 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 ASTM C1059

## **HEALTH & SAFETY**

- Please ensure that hand gloves and goggles are worn during installation.
- 4 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:

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

