## **EDEN SUPA GROUT 100**

High-Grade, Non-Shrink Cementitious Structural Grout



## PRODUCT DESCRIPTION

EDEN SUPA GROUT 100 It is a single-component, ready-to-mix, free-flowing, non-shrink, quick-set structural cementitious grout, engineered to deliver high early and ultimate strength. It is specifically formulated for applications such as anchoring and grouting of anchor bolts, retrofitted reinforcing steel, steel column bases, and various other installations thanks to its unique featured two-stage shrinkage compensation mechanism. When mixed to a fluid consistency, the non-shrink grout will meet the standards of ASTM C 1107 and CRD 621. It will maintain its fluid consistency for a maximum working time of 25 minutes at 50°F (10°C).

## **SPECIAL FEATURES**

- Suitable for partial or full-depth repairs to bridges, roads, industrial floors, and other concrete surfaces.
- ♣ Extended open working time
- ♣ High resistance to vibration
- ♣ Rapid strength development
- ♣ Low peak exothermic reaction for large pours
- ♣ High effective bearing area
- **★** Excellent flowability and non-shrink properties

## WHERE TO USE

- Grouting under baseplates, columns, and equipment not subjected to heavy impact or vibratory loads.
- Grout jacking of concrete slabs.
- Grouting pre-stressed or post-tensioned tendons, anchor bolts, or cables.
- Underpinning structures grouting.
- Grouting holes or cracks in concrete.
- Void backfilling in tunnels.
- **♣** Grouting post-tensioned structural sections.

## **APPLICATION PROCEDURE**

# Stage-1: SURFACE PREPARATION & INVESTIGATIONS A – Pre-Substrate Investigation

- ♣ Best practice for optimal result requires that surfaces to grouted is properly cleaned. Observe substrate for any existing coating or membrane oils, dirt, organic substances, dust and the presence of loose laitance and debris that can affect the bond-ability of the grout with the surface to be grouted.
- Ensure new concrete structure to be grouted is properly cured (at least 28 days as best practice) and concrete strength is adequate (a minimum of 25MPa is generally accepted as minimum strength standard).

## **B - Surface Preparation**

Careful surface preparation is essential for optimum finish, bonding, strength and durability, thus surface needs to be clean, dry and sound, free of any contamination which may harmfully affect the

- adhesion of the grouting material with surface to be grouted. In order to achieve this, concrete surface must be mechanically profiled and prepared by shot blasting, sand blasting, water-jetting, scarifying, diamond grinding or other engineering-approved method.
- Refence international concrete restoration institute (ICRI) CONCRETE SURFACE PROFILE (CSP) #3 standard for acceptable profile height. Maximum moisture content should not exceed 5%.

## **C - Post Investigations**

- ♣ Any uneven or visibly loose pieces needs to be chipped off and perfected using EDEN reprofiling range of mortars to achieve an excellent smooth finish
- Thoroughly remove any evidence of grinding dust observed.
- Check to ensure all form work are firmly put in place and all points are without leaks.

## **Stage-2: APPLICATION**

## A - Mixing

Mix EDEN SUPA GROUT 100 by adding the majority of the mixing water to the mixer. Then, introduce the powder into the water and adjust as necessary to achieve the desired consistency. Mechanically mix the grout for a minimum of three minutes and allow mixed slurry to stand for one minute to allow entrained air dissipate.

## **B – Pouring/Placement**

Pour EDEN SUPA GROUT 100 from one side only of the form work, steadily and consistently, ensuring not to rush which can lead to entrapment of air. EDEN SUPA GROUT 100 will flow under its own weight (Self Levelling), from one side of the form to the other side. Standard practice recommends that the shortest line of travel across the form should be taken as the pour side for grouting.

## **RECOMMENDATION:**

**Before Use** 



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# A ISE -O HIS CONSTRUCTION

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Check product seal to ensure it is unbroken or fake. Consult customer support should any concern arise for clarity and Technical support.

## General

- Ensure that excess water is not used in mixing grout outside recommended quantity.
- ♣ Do not over mix grout longer than required.

## TECHNICAL PROPERTIES

Packaging	20Kg				Concealed Packaging
Shelf life	12 months minimum from date of production				If stored properly inoriginal, unopened and undamaged sealed packaging.
Appearance	Greyish				(Powder – Cement like)
		Settir	ng Time Det	ails	
Consistence	Trowel-able				Flowable
Water-ratio	3.6L/20kg				4L/20kg
Initial set-time	3hrs				4.5hrs
Final set-time	4.5hrs				6.5hrs
Wet Density	Appx. 2200kg/m <sup>2</sup>				Flowable
Installation Temperature	A minimum <b>10°C</b> – Maximum <b>30°C</b>				Degree Celsius
		Mecha	ınical Prope	rties	
	Age (Days)				
Consistence	1	3	7	28	
Stiff	>25	>39	>47	>65	
Plastic	>23	>35	>43	>57	Compressive Strength MPa
Flowable	>21	>30	>38	>49	
				>13.8	Flexural Strength MPa
			>5	>10	Bond Strength MPa
		Tech	nical Propert	1	
Pot Life	~ 2hrs				@ 23°C
Young Modulus	25GPa				
Expansion Time	Initiation = 15mins & Termination = 3hrs				Plastic State
Characteristics Expansion Consumption	1 -2% 115bags/ (m³)				Plastic State
Air Temperature	Minimum = $+5^{\circ}$ C & Maximum = $+35^{\circ}$ C				
Folerable Layer Build Thickness	Minimum = 10mm & Maximum = 75mm				(Per Pour)
Standard Compliance	RD-C 621, Corps of Engineers, Specification for				ASTM C1107, "Standard Specification for
Standard Compilance	Non-Shrink Grout				Packaged Dry, Hydraulic-Cement Grout



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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 dries/hardens.

## **TECHNICAL SUPPORT**

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

## **STORAGE AND SHELF LIFE**

- EDEN SUPA GROUT 100 can be stored up to 12 months minimum from date of production if stored properly in original, unopened and undamaged / sealed packaging.
- ♣ EDEN SUPA GROUT 100 is supplied in 20Liters Keg, 210Liters drums, & 1,000Liters Tank.
- Storage area should be in dry conditions and in original packaging at temperatures between +5 °C and +30 °C.
- 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 requirement of ASTM C 494 Type A&F, En943, Part 2, Tables 1&2..

## **HEALTH & SAFETY**

- Please ensure that hand gloves and goggles are worn when handling product.
- 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 of product.
- ♣ For Professional Use only.

## **ADDITIONAL INFORMATION**

AISE-OHIS *EDEN CONSTRUCTION (CHEMICALS) 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 agents
- ♣ Decorative / Reprofiling mortars
- ♣ Tile adhesive and grouts
- Monolithic Floor Hardeners

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

