

# EDEN ADMIX 101

## High-Efficiency Water-Reducing Super Plasticizer

### PRODUCT DESCRIPTION

EDEN ADMIX 101 is a high-performance super plasticizer engineered to substantially enhance workability and durability while reducing permeability. It improves both the plastic and hardened properties of concrete. When incorporated into mix designs, it facilitates cement reduction and ensures exceptional final strength gain during and after curing. Additionally, batching water can be reduced by up to 30% without compromising the concrete's workability, resulting in higher final strength gains. It is a ready-to-use liquid that is added to the concrete along with the mixing water. The plasticizing effect and water reduction are maximized when the EDEN ADMIX 101 is introduced after 70-80% of the mixing water has been added.

### SPECIAL FEATURES

- ✚ Enables specified strength grades to be achieved with reduced cement content and increased workability.
- ✚ Easy-to-use liquid form and Low dosage requirement, making it economical
- ✚ Improved surface finish and increased durability
- ✚ Good initial slump retention time and enhanced workability, and pumping properties.
- ✚ Suitable for producing flowing concrete, facilitating easier construction with quicker placement and compaction without increasing water content
- ✚ Improved compressive and flexural strength of concrete at both early and final stages
- ✚ Reduced long-term shrinkage and creep thus minimizing the risk of segregation and bleeding
- ✚ Protects reinforcement steel against harmful water-borne attacks
- ✚ Reduces the need for on-site adjustments of slump and workability
- ✚ Minimizes the risk of segregation and bleeding
- ✚ Chloride-free, making it suitable for pre-stressed and reinforced concrete applications

### WHERE TO USE

- ✚ To produce high-strength, high-grade concrete with significantly reduced water content, resulting in low permeability and high early strength.
- ✚ To produce excellent, High grade and workable concrete that requires minimal or no vibration during placement.

- ✚ Can be used in producing various types of concrete, including ready-mix, pumped concrete and Pre-Cast Concrete.
- ✚ Used to achieve workable concrete with lower total water content, ensuring high-quality concrete for demanding applications.:

### DOSING ADMIXTURE TO CONCRETE MIX

#### Stage-1: PRE-MIX

##### A – Trial Mix

- ✚ Best practice for optimal result requires that a trial mix is carried out. The recommended dosage falls within a range within which satisfactory result desired can be attained by client.

##### B - Dosing

- ✚ The optimum dosage of EDEN ADMIX 101 to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. For high strength, high workability concrete the typical dosage range is from 1.0% to 2.0% by weight of cement content or cementitious material to be used for casting

##### C – Over Dosing Effects

- ✚ Exceeding the recommended dosage of admixture may result in increased workability, a slight rise in air entrainment, and a delay in setting time. However, the ultimate strength of the concrete will not be negatively impacted and is typically higher than that of standard concrete when properly placed and cured. This is especially beneficial for precast concrete and



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other applications requiring high early strength.

### Stage-2: ADDING ADMIXTURE TO MIX

The quantity of EDEN ADMIX 101 measured should be added along with the gauging water. In accordance with best practices for optimal results, add EDEN ADMIX 101 during the final phase, after pre-wetting the mix with 70-80% of the total required/calculated water to be used.

### RECOMMENDATION:

#### Before Use

It is recommended that product is stirred well before using for at least 1-2 min. Check product seal to ensure it is unbroken or fake. Consult customer support should any concern arise for clarity and Technical support.

#### General

- ✚ Samples for crushing / compressive test should be set aside unfaithfully especially when a trail mix was not

carried out.

- ✚ The use of admixture is not an excuse for bad concreting practices such as failure to vibrate concrete after placement, not adhering to cementitious dosage per cubic meter, not employing the use of form release, not observing proper curing of concrete best suited as the case may be amongst others.
- ✚ Observing proper concrete curing after initial setting is of primary importance and client is advised to strictly follow all standard curing procedures to avoid concrete strength integrity being compromised.
- ✚ EDEN ADMIX 101 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.

## TECHNICAL PROPERTIES

<i>Packaging</i>	20Liters keg, 210Liters Drums & 1,000-liter Tanks	<i>Concealed Container</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>	Brownish	<i>(Viscous Liquid)</i>
<i>Density</i>	~ 1.18 ± 0.02	<i>kg/liter</i>
<i>Base Formulation</i>	SNF BASE (Sulphonated naphthalene formaldehyde)	
<i>Corrosion behavior</i>	Component were selected according to EN9-314: Annex A.1	<i>EN9-314</i>
<i>Water Reduction</i>	> 20 - 30% compared with Reference mix	
<i>PH</i>	~ 7.0 ± 1	
<i>Retention of consistency</i>	40 mins > Reference mix at initial	
<i>Chloride content</i>	Nil	<i>(as per BS 5075)</i>
<i>Air Entrainment</i>	Less than 1.95%:	<i>(as per ISO 9103)</i>
<i>Dosage</i>	1.0 – 2.0% the weight of cementitious material used	
<i>Standard Compliance</i>	ASTM C-494 TYPE A&F	<i>En943, Part 2, Tables 1&amp;2.</i>

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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 ADMIX 101 can be stored up to 12 months minimum from date of production if stored properly in original, unopened and undamaged / sealed packaging.
- EDEN ADMIX 101 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.

