



**POUR IN THE STRENGTH**

## TECHNICAL DATA SHEET



**EdenCrete® is a carbon nanotube-enriched liquid admixture that elevates concrete structures to new levels of strength and toughness. When added to concrete mixtures, it performs like multiple additives rolled into one. It boosts surface abrasion resistance, reduces permeability and shrinkage, and improves strength properties like no other product on the market today.**

### Features

- Convenient for use in precast and ready-mix concrete operations, including dry-batch and central plant mixers.
- Ready-to-use liquid admixture.
- No special mixing equipment needed.
- Added to the concrete mixture at the plant.

### Benefits

- Higher ultimate tensile and compressive strengths.
- Reduces concrete permeability.
- Increases abrasion resistance.
- Reduces shrinkage strain and cracking.
- Potential for optimization of concrete mixes to reduce dimensions, steel reinforcement, supplementary cementitious materials, and cement.
- Improves concrete durability and resistance to chemical attack, thereby *inhibiting corrosion of steel reinforcement in concrete.*

### Areas of Application

- Concrete beams and suspended slabs where tensile and flexural strength are needed.
- Infrastructures such as water distribution, bridges, dams, and locks where steel corrosion and abrasion are a concern.
- Engineered structures where high steel content causes problems with concrete placement and consolidation.
- Precast products, as well as tilt wall, runway, and roadway applications.

#### EdenCrete® - The Original Concrete Additive Makes Stronger, Tougher Concrete



##### IMPROVES

- Abrasion Resistance ✓
- Compressive Strength ✓
- Flexural Strength ✓
- Modulus of Elasticity ✓
- Tensile Strength ✓

##### REDUCES

- Dosage -
- Life-Cost ✓
- Permeability ✓
- Shrinkage ✓
- Staining ✓

#### EdenCrete HC™ - High Concentrate Reduces Storage, Shipping Costs, and Dosage



##### IMPROVES

- Abrasion Resistance ✓
- Compressive Strength ✓
- Flexural Strength ✓
- Modulus of Elasticity ✓
- Tensile Strength ✓

##### REDUCES

- Dosage ✓
- Life-Cost ✓
- Permeability ✓
- Shrinkage ✓
- Staining ✓

#### EdenCrete P<sub>2</sub>™ - Pozzolanic Mixes Increases Cement Efficiency, Optimizes Pozzolanic Mixes



##### IMPROVES

- Abrasion Resistance ✓
- Compressive Strength ✓
- Flexural Strength ✓
- Modulus of Elasticity ✓
- Tensile Strength ✓

##### REDUCES

- Dosage ✓
- Life-Cost ✓
- Permeability ✓
- Shrinkage ✓
- Staining ✓

## Physical Properties and Dosage Rates Table

Products	Specific Gravity [g/cm <sup>3</sup> ]	Dosage [oz./yd. <sup>3</sup> ]	Physical State	Color
EdenCrete®	1.01 +/- 0.02	0 - 256	Liquid	Black
EdenCrete HC™	1.02 +/- 0.02	0 - 256		
EdenCrete P <sub>2</sub> ™	1.15 +/- 0.02	0 - 20		

**Harness  
the strength  
of carbon  
nanotubes  
for your  
next pour.**

### Application Guidelines

All **EdenCrete®** products can be used in a dry-batch or central plant mixing process and are dispensed into the truck simultaneously with other admixtures. If added to a ready-mix truck in any other sequence, ensure a minimum of 70 revolutions at maximum rpm before placing concrete on the ground.

It is the responsibility of the end user to conduct trial batches to ensure the adequate concrete mixture proportions are consistent with the concrete properties needed. Please contact your local **EdenCrete®** sales representative for assistance with using **EdenCrete®**.

When designing concrete, refer to the table above for physical properties and typical dosage rates for all **EdenCrete®** products. It is possible to exceed the recommended dosages with continued improvement to your concrete. For **EdenCrete®** dosages outside of manufacturers recommendations, please contact your **EdenCrete®** representative.

For initial evaluations of **EdenCrete®** into a new concrete mix, subtract the full weight of the **EdenCrete®** from the design water and reserve an additional 2% of the remaining mix water. It may be necessary to add the entire amount of remaining mix design water to achieve the slump specification for the job, but some mixes are able to slightly reduce the water content and still meet the required slump.

**EdenCrete®** should be added as near to the end of the mixing sequence as is possible, after all of the raw materials

have been wetted to help achieve maximum dispersion and efficacy. The addition of **EdenCrete®** to dry materials in the mixer will impede performance and is not recommended by Eden Innovations LLC.

**EdenCrete HC™** and **EdenCrete P<sub>2</sub>™** can be combined for improvements in unique performance applications where pozzolans create variability in your mix. For dosages and usage instructions of **EdenCrete HC™** and **EdenCrete P<sub>2</sub>™**, please contact your **EdenCrete®** representative.

### Safety

Although **EdenCrete®** is not considered to be a dangerous material to handle, before handling, refer to the corresponding Safety Data Sheet (SDS) for health, safety, and environmental information.

### Transport, Storage, and Handling

**EdenCrete®** should be transported and stored at a temperature of 40-95° F (5-35° C). If the **EdenCrete®** is allowed to freeze, the particles will irreversibly precipitate. For bulk storage, the admixture tank should be constructed of plastic or fiberglass. The tank should be sealed after the **EdenCrete®** is added. Do not store containers in direct sunlight. Properly stored **EdenCrete®** has a shelf life of 12 months and agitation may be required.

### Further Information

For samples and technical service, please contact us [information below] or visit our website at [edencrete.com](http://edencrete.com)

**DISCLAIMER** The information contained in this brochure is based on knowledge and experience with the materials used in the production of the **EdenCrete®** admixture. The application of the **EdenCrete®** admixture is employed by the customer who is outside the control of Eden Innovations LLC. Therefore, Eden Innovations LLC is not liable or responsible for any loss, damage, or injury from the use or application of the **EdenCrete®** admixture product. Furthermore, customer agrees to the waiver of all express and implied warranties, including but not limited to, the implied warranty of merchantability and supersedes any prior or contemporaneous discussions regarding **EdenCrete®** and/or the **EdenCrete®** admixture product.

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 **EdenCrete®**  
CARBON STRONG™