



**EdenCrete® - The Original Concrete Additive**



**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.

## Primary Benefits

- Potential for optimization of concrete mixes to reduce dimensions, steel reinforcement, supplementary cementitious materials, and/or cement.
- Improves concrete durability and resistance to chemical attack, thereby inhibiting corrosion of steel reinforcement in concrete.
- Reduces concrete permeability.
- Increases abrasion resistance.
- Reduces shrinkage strain and cracking.
- Improved rheology allows for pumping pressures to be reduced, lowering dust and rebound.

## Secondary Benefits

- Higher ultimate strength [compressive, flexural, an split-tensile].

## EdenCrete® Dosage

It is recommended to use EdenCrete® at a dosage range of 16 to 256 oz/yd<sup>3</sup> [0.6 to 9.9 L/m<sup>3</sup>] of concrete.

## Application Guidelines

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, use a dosage within the recommended range for EdenCrete®. Dosages exceeding the recommended range may, in some cases, provide continued benefit to your concrete. For EdenCrete® dosages outside of the manufacturer's 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. It may be necessary to add the entire amount of remaining mix design water to achieve the slump specification for the job.

## Recommended Sequencing

EdenCrete® should be added as close to the end of the mixing sequence as 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® should never be diluted with the mix water before batching. EdenCrete® products should be added separately when using multiple products. EdenCrete® and EdenCrete P<sub>2</sub>® may be used in the same concrete batch simultaneously, but the use of separate dispensing systems is required to dose the concrete.

## Areas of Application

- Concrete beams and suspended slabs where tensile and flexural strength are needed.
- Infrastructure elements 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.
- In shotcrete, to improve rheology for reduced pump pressure, dust, and waste from rebound.
- Precast and prestressed applications such as bridge beams and road barrier, tilt wall construction, etc. for early-strength development and improved durability.
- In ready-mixed concrete for improved durability and extended service life.

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

## Recirculation

It is recommended to gently recirculate **EdenCrete**<sup>®</sup> if it has not been utilized in two months. Dedicated **EdenCrete**<sup>®</sup> dispensing systems automatically recirculate with enough agitation to allow for the **EdenCrete**<sup>®</sup> to be used at any time.

## Transport, Storage, and Handling

**EdenCrete**<sup>®</sup> should be transported and stored at a temperature of 40–95° F [5–35° C]. If the **EdenCrete**<sup>®</sup> 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**<sup>®</sup> is added. Do not store containers in direct sunlight. Properly stored **EdenCrete**<sup>®</sup> has a shelf life of 12 months.

## Safety

Before handling, refer to the corresponding Safety Data Sheet (SDS) for health, safety, and environmental information.

## Dispensing and Equipment

**EdenCrete**<sup>®</sup> products are dispensed into the mixer or drum using a direct feed system. **EdenCrete**<sup>®</sup> should be sequenced immediately after the other admixtures or simultaneously with the tail water. If added to a ready-mix truck in any other sequence, ensure a minimum of 50 revolutions at maximum rpm before placing concrete.

When selecting equipment and plumbing materials, please adhere to the following:

- Utilize pumps intended for low viscosity fluids, like water, with moderate microscopic solids content.
- Utilize industrial rubber hose with EPDM, SBR, or PTFE liner material.
- Do not utilize dispensing equipment or recirculation equipment that is designed for or has been used for **EdenCrete P<sub>z</sub>**<sup>®</sup>, as the two products are not approved for mixing prior to their addition to concrete.

## Further Information

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

**EdenCrete**<sup>®</sup> and **EdenCrete P<sub>z</sub>**<sup>®</sup> have been successfully submitted to the AASHTO NTPEP program, and both qualify as a Type S admixture according to ASTM C494 [AASHTO M194].

**DISCLAIMER** The information contained in this brochure is based on knowledge and experience with the materials used in the production of the **EdenCrete**<sup>®</sup> admixture. The application of the **EdenCrete**<sup>®</sup> 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**<sup>®</sup> 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**<sup>®</sup> and/or the **EdenCrete**<sup>®</sup> admixture product.