

1. How much Trident needs to be used to get the strength gain?

Trident should be dosed within **600g–1200g** per cubic meter or **500–1100g** per cubic yard. Trident is dosed based on volume, **NOT** by weight of cement. Dosages will vary by region (e.g., best results in Europe have been closer to **600g** per cubic meter).

2. What happens if I use too much or too little Trident?

While dosing Trident outside the optimum range will **NOT** reduce compressive strength, the level of enhancement will be lower compared to dosing within the optimum range. For any selected mix design, we recommend conducting dosage trials to ensure the optimum dosage is found.

3. Are there any safety concerns while handling Trident?

There are currently no safety concerns while handling Trident. Trident is a liquid-based admixture that enhances compressive strength. We recommend using equipment traditionally used in the concrete production process. For detailed information, please refer to the Material Safety Data Sheet (MSDS).

4. How is Trident mixed into the concrete?

Trident is mixed during the liquid mixing stages of the concrete production process. For most mix designs, dosing Trident as the last element is recommended. In specific situations, we may recommend dosing Trident before other liquid admixtures. For specific technical assistance, please contact one of our Technical Sales representatives.

5. How long do I need to mix the concrete after adding Trident?

We recommend mixing the concrete for **30 seconds** to **1 minute** after Trident has been fully dosed. This ensures the additive is mixed homogeneously throughout the batch.

6. Does Trident require special equipment in a production plant setting?

Trident does not require any special equipment. Equipment designed to dose liquid additives into concrete will work with Trident. Trident does **NOT** need to be constantly mixed or agitated.

7. Is Trident corrosive to pipes and pumps?

Trident is not corrosive to pipes and pumps. We recommend using steel or plastic pipes and pumps to dose Trident correctly.

8. Does using more Trident provide more compressive strength?

Finding the optimum dosage of Trident is key to unlocking its strength enhancement potential. Trident works on a bell-curve, meaning that using too little or too much will result in less strength enhancement than dosing at the optimum level.

9. How does Trident affect the workability (slump, retention, setting time) of the concrete?

Trident does **NOT** have any effect on the workability of concrete. If your concrete is designed to have a **5" slump** with a **2-hour retention**, that is what you will receive when using Trident.

10. Does Trident need any specific storage instructions?

While Trident does not degrade when exposed to UV light or other light sources, it can freeze. Trident **IS** freeze-thaw reversible, meaning that if the solution freezes, thawing and slight agitation will restore functionality. Trident freezes below the freezing point of water. For more technical information, please contact a Sales Representative.

11. What is the shelf life of Trident?

Trident has a shelf life of **18–24 months**. We recommend using Trident within that timeframe.

12. Will Trident change the color of the concrete?

Trident will **NOT** change the color of concrete. If you are using oxide pigments to adjust the color profile of your concrete, Trident can work alongside those to provide extra compressive strength while maintaining your desired color.

13. Does Trident work with Supplementary Cementitious Materials (SCMs)?

Trident was designed to work alongside SCMs such as GGBS, Slag, Fly Ash Type C, and Fly Ash Type F. Extensive testing has shown that customers can use up to **50%** SCMs in their mixes with Trident to save on cost and CO₂ emissions. For more information, please contact a Sales Representative.

14. Does Trident interact adversely with any admixtures used today?

Trident works in congruence with super-plasticizers, air-entraining agents, and other common admixtures. For specific compatibility information, please reach out to one of our Sales Representatives.

15. What container sizes are available?

For samples, Trident is provided in **500ml** quantities. For production scale, Trident is available in **55-gallon drums** or **275-gallon IBC totes**. For bulk purchases, please contact a Sales Representative.

16. When do you begin to see strength enhancement?

Trident starts working as soon as it is added. Strength enhancement of **1000+ PSI** can be seen within **12 hours**. This enhancement continues to grow over time, with certain mix designs showing up to **2400 PSI** enhancement within **28 days**.

17. Is Trident certified under ASTM C494?

Trident has undergone extensive testing, including **ASTM C494 Type S** admixture testing. For certification documents or test results, please contact our Sales Representatives.