



Pipedream Industries Inc.  
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## TECHNICAL DATA SHEET

Product: Trident-F01 Concrete Additive

Revision Date Jan 30, 2026

Acc to OSHA & ANSI

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### DESCRIPTION

Trident-F01 Concrete Additive is a concrete additive capable of providing an increase in the ultimate strength with low loading amount (500ml-1200ml per Cubic Meter). The Strength additive is composed of modified carbon nanotubes that are dispersed in an aqueous matrix. The nanoparticles enhance concrete's mechanical properties and provide resistance to corrosion, water entrenchment, abrasion, and bending. This additive is meant to be used in conjunction with OPC 53 and FlyAsh (Class F and Class C). Other cementitious materials can be used but are not recommended to be used in conjunction with Trident-F01. Trident-F01 is added to concrete at the batching plant or on-site. Never add Trident-F01 to cured concrete.

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### CHEMICAL COMPOSITION:

Carbon Nanotube, Plasticizing/Dispersing Agent(s), Stabilizing Agent(s), Water

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### SUPPLY FORM:

Liquid Dispersion. Black in Color

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### TYPICAL PROPERTIES:

PROPERTY	Baseline M25 Concrete	M25 Concrete with Trident-F01	UNIT
Compressive Strength	34.3	43.4	MPa
Flexural Strength	2	4.3	MPa
Water Permeability	0.07	0.04	KT/M <sup>2</sup>

Chloride Permeability	585	235	C
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This test was conducted with 800 ml of Trident-F01 per Cubic Meter of M25 Concrete

**Table 1: Uniformity Test Results**

Information	Admixture Information
Brand Name	Trident F-01
Manufacturer	Pipedream Industries Inc.
Specific Gravity	1.033
Solid content (%)	27.921
pH	10.94
Chloride Content (% per BS EN 480-10:2009)	0.001

## **STORAGE:**

The liquid dispersion should be stored in its original container tightly sealed and in a dry dark place. If stored properly, the Trident-F01 additive has a lifespan of ~1.5 years. During Storage, the liquid additive should not freeze as this will lead to a loss in dispersion quality and effectiveness. The additive is recommended to be used within 3 to 6 months for best performance. For more storage information, please refer to the Material Safety Data Sheet provided by Pipedream Industries.

## **PACKAGING:**

The packaging material will consist of a rigid plastic container with an entryway for charging and discharging material.. The sizes we ship are as follows: 55 gallon and 250 gallon. We can also provide bulk liquid to be stored in stationary tank depots onsite. For larger quantities, please reach out to [info@pipedreamindustries](mailto:info@pipedreamindustries) for more information.

## **GENERAL PROPERTIES:**

The Trident-F01 Concrete Additive is characterized as:

- Low Effective Loading
- Better Water Resistance
- Better Corrosion Resistance
- Higher Compressive Strength
- Cement Reduction

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## **INSTRUCTIONS AND RECOMMENDATIONS OF USE:**

The dispersion and incorporation is the most important factor in realizing the Trident-F01 Concrete Additive's properties. Due to this fact, the liquid is best incorporated directly into the Concrete after superplasticizer and water have been added. Add Trident-F01 slowly while mixing to ensure homogenous dispersion in concrete. The liquid dispersion enhances the compressive and flexural strength of concrete, reducing the amount of cementitious material required. We recommend using the additive in conjunction with OPC 53 and Flyash (Class C and Class F). Other cementitious materials are not recommended to be used alongside Trident-F01 Concrete Additive.

Due to the way the liquid dispersion enhances strength, expect the concrete to achieve lower water permeability and chloride permeability.

We recommend using the additive in conjunction with other admixtures to ensure slump profile remains consistent.

The liquid dispersion can be used in both Ready-Mix Concrete and Precast/Prestressed Concrete.

When designing a new concrete recipe, we recommend conducting small trials to ensure the proper dosage and strength is achieved. We recommend designing concrete mixes and generating 12 cylinders/blocks for testing. Test Compressive strength at the following days: 3 Days, 7 Days, 14 Days, and 28 Days.

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## **APPLICATIONS:**

The Trident-F01 Concrete additive is used to enhance strength in Concrete mixes. Typical application is used to comply and exceed compressive strength regulations while utilizing reduced cementitious materials.

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## **HANDLING AND SAFETY:**

The product should be stored in its tightly sealed original container in a cool dry place. Once opened, the liquid dispersion should either be completely used, disposed of, or resealed in its original packaging. Consult the Material Safety Data Sheet (MSDS) for additional information on storage.

When handled by an individual, the individual should wear Masks and Gloves. Do not

handle or open the container without the proper PPE. Consult the Material Safety Data Sheet (MSDS) for additional information on handling and safety precautions.