

3D TRASAR[®]

3DT288

Cooling Water Corrosion and Deposit Inhibitor



Product Bulletin

PRODUCT DESCRIPTION AND APPLICATION

3D TRASAR products are part of an innovative water treatment program that uses proven technology to prevent operational problems. 3D TRASAR compensates for both routine and special causes of system variation. 3D TRASAR programs provide a return on your investment through their unique control and diagnostic capabilities.

3D TRASAR 3DT288 is designed for use in systems with recirculating water calcium concentrations between 50 and 1000 ppm (as CaCO₃) at the targeted cycles when the pH is less than 8.7. Because **3DT288** contains no molybdate or zinc, it should be considered as a more environmentally friendly chemistry to meet the regulatory needs of many customers.

3DT288 is a balanced blend of corrosion and scale inhibitors designed for use in open recirculating water systems.

3DT288 contains:

1. Dual function phosphonate inhibitor for both cathodic (pitting) corrosion and calcium carbonate scale. The active material is a patented, proprietary chemical called Phosphinosuccinic Oligomer (PSO).
1. Phosphoric Acid inhibitor for anodic corrosion
1. Organic High Stress Polymer (HSP) dispersant.
1. Blend of both benzotriazole (BZT) and tolytriazole (TT) for copper corrosion inhibition.

3DT288 provides a superior alternative to traditional cooling water inhibitor blends containing pyrophosphate, orthophosphate, zinc, molybdate, etc. PSO is superior to pyrophosphate in that it will not revert to orthophosphate and is stable in the presence of oxidizing biocides. As a result, **3DT288** delivers lower total phosphate concentrations and less polymer demand. Additionally, because PSO does not revert to orthophosphate, **3DT288** can be effectively used in systems with long holding time indices (HTI's).

3DT288 contains a blend of Tolytriazole (TT) and Benzotriazole (BZT). This blend of azoles is more halogen stable and provides improved copper and yellow metals corrosion protection.

PHYSICAL & CHEMICAL PROPERTIES

These properties are typical. Refer to the Material Safety Data Sheet (MSDS), SECTION 9, for the most current data.

Form	Liquid
Density	9.6 lb/gal
Specific Gravity @ 60°F (16°C)	1.15
pH (Neat)	1.4
Freeze-Thaw Recovery	Complete
Flash Point	Not Applicable
Odor	None
Freeze Point	-6°C (21°F)
Solubility in Water	Complete
Appearance	Light Yellow

ACTIVE CONSTITUENTS

Active	Function
Phosphoric Acid	Mild steel corrosion inhibition
Tagged High Stress Polymer (THSP)	Dispersant
Phosphinosuccinic Oligomer (PSO)	Mild steel corrosion and CaCO ₃ scale inhibition
Benzotriazole (BZT)/Tolytriazole (TT)	Copper corrosion inhibition
TRASAR® Technology	Product Monitoring and Control

REGULATORY APPROVALS

Please refer to SECTION 15 of the Material Safety Data Sheet (MSDS) for the most recent approval information.

This product is intended for industrial use only. It must not be fed to potable water systems of any type.

MATERIALS OF COMPATIBILITY

The following data is for the product as supplied and should be useful in specifying materials of construction of tanks, pumps, valves, piping, etc. used for storing, feeding, or transporting material.

Compatible	Not Compatible
Buna-N	Phenolic
EPDM	Stainless Steel 304
Polyethylene	Stainless Steel 316
Polypropylene	Neoprene
PVC	Viton® synthetic rubber
Plasite 4300	Polyurethane
Plasite 7122	
Brass	
Hypalon® elastomer	
HDPE	

DOSAGE AND FEEDING

For complete dosage and feeding recommendations, consult your Nalco Sales Engineer.

ENVIRONMENTAL AND TOXICITY DATA

Biological Oxygen Demand (5-day BOD ₅)	4850 ppm
Chemical Oxygen Demand (COD)	150,000 ppm
Total Organic Carbon (TOC)	53,000 ppm

Refer to SECTIONS 11 and 12 of the Material Safety Data Sheet (MSDS) for all available mammalian and aquatic toxicity information.

SAFETY AND HANDLING

3DT288 is an acidic product and may cause skin and eye irritation. Chemical-resistant gloves and safety goggles should be worn when handling **3DT288**. Read SECTION 8 of the Material Safety Data Sheet for specific personal protective equipment (PPE) recommendations and SECTION 3 for health effects information.

STORAGE

3DT288 should be stored in a location where the product temperature can be maintained between 22°F (-6°C) and 110°F (43°C). In cold climates, heat tracing and insulation of exposed containers and transfer lines may be necessary.

The recommended in-plant storage limit for **3DT288** is twelve months. **3DT288** should be protected from freezing.

Refer to the Material Safety Data Sheet (MSDS), SECTION 7, for the most current data.

REMARKS

If you need assistance or more information on this product, please call your nearest Nalco Representative.

For more news about Nalco Company, visit our website www.nalco.com

For **Medical and Transportation Emergencies** involving Nalco products, please see the Material Safety Data Sheet for the phone number.

ADDITIONAL INFORMATION

3D TRASAR, TRASAR, NALCO and and Logo are trademarks of Nalco Company (11-9-2009)
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Subsidiaries and Affiliates in Principal Locations Around the World

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