

# DTEA II™ SR Plus SC



“Cooling water solutions in a tablet”

## Introduction to DTEA II™ Slow Release Tablet Plus Scale & Corrosion Inhibitors

DTEA II™ SR Plus SC is a solid, slow release form of DTEA II, an organic deposit penetrant, dispersant, and remover, and corrosion inhibitor, PLUS scale and corrosion inhibitor additives for added performance. It is intended for use in small to medium circulating water systems, such as cooling towers. One tablet lasts 3 - 4 weeks depending on system temperature and water flow conditions. This convenient tablet form eliminates the need for feeding equipment and minimizes exposures due to chemical handling. Patent protected (US Patent 9,090,495).

## Product Description

<b>Ingredients:</b>	DTEA II™, scale and corrosion inhibitors, proprietary binder, and release agent.
<b>Physical State:</b>	Solid (tablet)
<b>Color:</b>	Off-white to tan
<b>Weight:</b>	100 g per tablet
<b>Dimensions:</b>	2 inch diameter, 1.5 inch height
<b>Packaging:</b>	See packaging section for details

## Formulation Description

DTEA II SR Plus SC is a solid tablet containing DTEA II and scale and corrosion inhibitors (HEDP and the homopolymer of polyacrylic acid) that gradually dissolves and releases the active ingredients when immersed in water.

## Benefits

The convenient, slow-release formulation reduces operating expenses through lower labor, energy, and equipment costs. In addition to the benefits provided by the slow release formulation, DTEA II SR Plus SC provides the expected benefits from DTEA II and added corrosion and scale inhibitors: improved heat transfer by deposit control and removal, protection of metal surfaces, and reduced use of biocides.

DTEA II SR Plus SC can be used alone in select cases but most generally as part of existing water treatment programs that address microbial control. (DTEA II is not registered for biocide use in the USA and can only be used for non-biocide purposes.)

DTEA II SR Plus SC is a new tool enabling water treatment service providers to treat small to medium size systems more cost effectively.

# DTEA II™ SR Plus SC



## Features

Unique slow release formulation

- Slowly dissolves in water (slow release)
- No feeding equipment necessary
- Minimizes hazards due to chemical exposure
- Organic deposit, scale, and corrosion control in one formulation
- Formulated for medium and small cooling towers (<250 refrigeration tons, <3,000 gal) and other circulating water systems
- Reduces service call visits
- Prolongs equipment service lifetime
- Especially beneficial for use in systems that have minimal monitoring, high recycle, high pH, high solids, and systems that place high demands on biocides
- No product change on freeze and thaw

Also provides the well known DTEA II features:

- Penetrates, disperses, and removes organic deposits on water system surfaces
- Reduces corrosion by keeping metal surfaces free of organic deposits, and providing chemical inhibition
- Increases biocide effectiveness and lowers their use levels and subsequent costs
- Reduces oxidizing biocide demand and increases biocide residuals
- Not affected by high pH; works best at pH above 7.
- Biodegradable; persistent in closed systems, and exhibits a friendly degradation profile in open systems which makes this an ideal choice in difficult to manage waste streams
- Not affected by high organic load
- Not affected by high concentrations of ammonia, hydrogen sulfide, or other strong nucleophiles
- Excellent compatibility with cooling water treatment programs. With glutaraldehyde, a pink color forms. Call us before using with glutaraldehyde.

## Slow Release Product Comparison

Features	DTEA II SR	DTEA II SR Plus SC
Organic deposit penetration by DTEA II	Yes	Yes
Organic deposit dispersal by DTEA II	Yes	Yes
Organic deposit removal by DTEA II	Yes	Yes
Yellow metal corrosion inhibition by DTEA II	Yes	Yes
Mild steel corrosion inhibition by additive	No	Yes
Scale inhibition by additive	No	Yes

## Usage & Dosage Information – Maintenance Mode

Any DTEA II product may be used in two modes, **cleanup** of a relatively fouled system or **maintenance** of a relatively clean system. The DTEA II SR Plus SC tablet is designed primarily for maintenance mode. For a

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heavily fouled system, first clean by physical and/or chemical means which may include the DTEA II liquid formulation.

**System maintenance dosage:** Use one DTEA II SR Plus SC tablet per 100 to 300 gal system volume (8 - 25 RT - Refrigeration Ton) every 3 - 4 weeks. Hang tablet in flowing water. Replace when depleted. Note: for fouled systems, initial treatment or cleanup may require a higher dosage (2X-3X). Surface fouling control may be monitored by measuring ATP levels on coupons. Corrosion coupons or instantaneous corrosion monitor should be used to determine inhibitor efficacy.

## Regulatory & Handling Considerations

DTEA II, the active ingredient in DTEA II SR Plus SC, is biodegradable (OECD guidelines). DTEA II aquatic use profile is in keeping with modern day expectations of water treatment chemicals for ecological friendliness. For comparison purposes, it is 6X to 60X safer in aquatic toxicity testing than the chemical called ADBAC (a popular biocide). The aquatic toxicity profile is provided for general comparative purposes only and does not imply, warrant, or state to use it in any manner not in keeping with local regulations. DTEA II products require handling that conforms to typical procedures required of strong industrial strength cleaners, deposit control agents, etc. Shipping is not regulated as per DOT standards.

DTEA II SR Plus SC is a concentrated industrial chemical. As with any chemicals that are not approved for ingestion, please do not take internally. As with most chemicals in our industry avoid contact with skin and eyes, and as this product is a solid, avoid breathing its dust. Use proper protective equipment such as rubber gloves, chemical workers goggles, and dust respirator. Please use goggles as this is a routine and customary minimal precaution for most chemical handling. Should contact occur, flush promptly with water. If any discomfort occurs, consult a physician. Read the Material Safety Data Sheet before handling this product.

DTEA II formulations are not sold, warranted, or implied to be used as a biocide by AMSA, Inc. in the USA. Such product use is allowed in the USA only under rules and regulations as specified under FIFRA and enforced by the USA EPA.

## Packaging

Each tablet is wrapped in a small, mesh bag. This mesh bag can be suspended in the treated water system. The tablet is enclosed in a plastic film wrap which must be removed prior to use. Six tablets are packaged in a sealed foil bag.



1: Foil bag containing 6 individually wrapped tablets



2: Individually wrapped tablet

