“Cooling water solutions in a tablet”

Introduction to DTEA II™ Slow Release Tablets

DTEA II™ SR is a solid, slow release form of DTEA II, an organic deposit penetrant, dispersant, and remover, and corrosion inhibitor. It is intended for use in small to medium circulating water systems, such as cooling towers, closed loop cooling systems, humidifier and air conditioner drain lines, and sump basins. A tablet-pack lasts 1 - 2 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. For added scale and corrosion control we recommend the DTEA II™ SR Plus SC tablet. Patent pending.

Product Description

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>DTEA II™, proprietary binder, and release agent.</th>
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</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid (tablet)</td>
</tr>
<tr>
<td>Color</td>
<td>Off-white to tan</td>
</tr>
<tr>
<td>Weight</td>
<td>100 g per tablet-pack</td>
</tr>
<tr>
<td>Dimensions</td>
<td>2 inch diameter, 1.5 inch height</td>
</tr>
<tr>
<td>Packaging</td>
<td>See packaging section for details</td>
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</tbody>
</table>

Formulation Description

DTEA II SR is a solid tablet that gradually dissolves and releases DTEA II when immersed in water.

Benefits

Unique slow release formulation

- Slowly dissolves in water
- No feeding equipment necessary
- Minimizes hazards due to chemical exposure
- 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

<table>
<thead>
<tr>
<th>Features</th>
<th>DTEA II SR</th>
<th>DTEA II SR Plus SC</th>
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</thead>
<tbody>
<tr>
<td>Organic deposit penetration by DTEA II</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Organic deposit dispersal by DTEA II</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Organic deposit removal by DTEA II</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Corrosion inhibition by DTEA II</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Additional corrosion inhibition by additive</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Scale inhibition by additive</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### 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 tablet is designed primarily for maintenance mode. For a heavily fouled system, first clean by physical and/or chemical means using the DTEA II liquid formulation.

**System maintenance dosage:** Use one DTEA II SR tablet-pack (1 dosage unit = 1 mesh bag) every 1 - 2 weeks per 200 to 600 gal system volume (16 - 50 RT - Refrigeration Ton). For higher demand: use 1 tablet-pack per 100 to 300 gal system volume (8 - 25 RT). Hang tablet in flowing water. Replace when depleted. Surface fouling control may be monitored by measuring ATP levels on coupons.
Regulatory & Handling Considerations

DTEA II, the active ingredient in DTEA II SR, 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 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-pack consists of tablets bound together in a small, mesh bag. This mesh bag can be suspended in the treated water system. The tablet-pack is enclosed in a plastic film wrap which must be removed prior to use. Six of these wrapped tablet-packs are packaged in a sealed foil bag.