

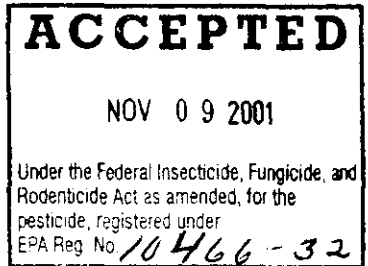
# TECHNICAL DATA SHEET

## *Ultra-Fresh*<sup>\*</sup> DM-25

Bacteriostatic and Fungistatic Liquid Preservative

E.P.A. Registration No. 10466-32

PCP Registration No. 26177

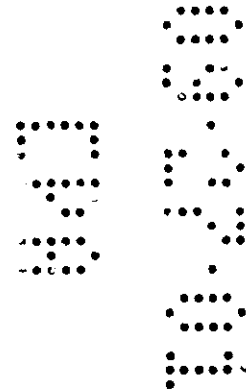


### PRODUCT DESCRIPTION

*Ultra-Fresh*<sup>\*</sup> DM-25 is a clear pale amber liquid used for rendering fabrics and water-based emulsions resistant to attack by microorganisms.

### PHYSICAL PROPERTIES

Appearance:.....Clear, pale amber liquid  
 Active Ingredient:.....25% 2-n-Octyl-4-isothiazolin-3-one  
 Solvent Carrier:.....Propylene Glycol  
 Density:.....8.6 lb./gal  
 Viscosity @ 25C / 77F:.....40 cs (Brookfield #1 spindle @ 60 rpm)  
 Flash Point.....107C / 225F  
 Solubility:.....Moderately soluble



### BIOLOGICAL ACTIVITY

Relatively low concentrations of *Ultra-Fresh*<sup>\*</sup> DM-25 will inhibit the growth of a wide variety of odor causing and staining microorganisms.

### TOXICITY

Acute oral toxicity LD <sub>50</sub> (rat)	1,328 mg/kg - estimate
Acute dermal toxicity LD <sub>50</sub> (rabbit)	1,210 mg/kg - estimate
Eye irritation (rabbit)	Severely irritating
Skin Irritation	No a primary irritant. Repeated exposure may result in sensitization of susceptible individuals.

### STABILITY

*Ultra-Fresh*<sup>\*</sup> DM-25 as supplied appears to be stable indefinitely at room temperature, and aqueous treatment solutions are also considered completely stable. The product is not stable in the presence of ammonia, primary, or secondary amines, or salts of these bases.

### HANDLING PRECAUTIONS

*Ultra-Fresh*<sup>\*</sup> DM-25 as supplied causes severe eye irritation and reddening of the skin and may be harmful if swallowed or inhaled. Therefore, precautions should be taken to prevent personal

contact and contamination of clothing or inhalation of mists or vapors. Wear goggles and rubber gloves. Keep containers closed when not in use. Use with adequate ventilation. Do not take internally. Wash thoroughly after handling. Remove contaminated clothing and launder before re-wearing.

**FIRST AID**

In case of contact, immediately flush the eyes with plenty of water for at least 15 minutes and call in a physician. Wash skin with soap and plenty of water. Remove and launder contaminated clothing. If the material is swallowed, give two glasses of water to drink. Call in a physician promptly. Never give anything by mouth to an unconscious person. It may be inadvisable to induce vomiting because of corrosive effects to mucous membranes.

**DIRECTIONS FOR USE**

The application levels given below are representative of those found necessary in practice. It is recommended that all fabrics be scoured prior to treatment with *Ultra-Fresh* DM-25. For each specific use, a trial run is recommended in order to determine the best application level and method of addition for the particular product being treated.

**1. Fabrics**

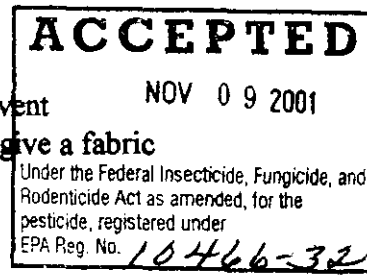
*Ultra-Fresh* DM-25 can be padded on to fabrics from either an aqueous or solvent dispersion. Sufficient *Ultra-Fresh* DM-25 should be added to the pad bath to give a fabric pickup of 0.1% to 0.2% w/w.

**2. Water-Base Emulsions/Adhesives**

Water-base adhesives and related emulsion systems can be rendered resistant to biologically induced instability and degradation by the addition of *Ultra-Fresh* DM-25. Not for use in food grade adhesives. An application level of 0.05% w/w based on total emulsion weight is recommended. *Ultra-Fresh* DM-25 should be treated as one of the components and added prior to mixing. In the case of hot-melt adhesives the temperature should not exceed 200C / 392F. The in-can and in-use protection conferred by *Ultra-Fresh* DM-25 will last indefinitely in the undiluted adhesive or emulsion.

**3. Polymer Systems**

Polymeric materials such as vinyl can be rendered resistant to the growth of mildew by the incorporation of *Ultra-Fresh* DM-25. Add 0.05% to 0.15% by weight of *Ultra-Fresh* DM-25 to the resin mix. The exact amount required for a specific usage can be readily determined by means of a preliminary trial.



**DECONTAMINATION PROCEDURES**

Wear protective clothing, impervious gloves, splash proof goggles and overshoes. Spills should first be contained by diking with earth, sand, etc. Shovel absorbed spill into containers for burial. Decontaminate spill area by flooding with a solution of 5% sodium bicarbonate and 5% of

sodium hypochlorite in water. The decontamination process is slightly exothermic. Adding solid sodium bicarbonate to any household bleach containing 5% hypochlorite makes up the decontamination solution. Rinse decontaminated spill area to sewer. Showers are recommended after any handling or exposure.

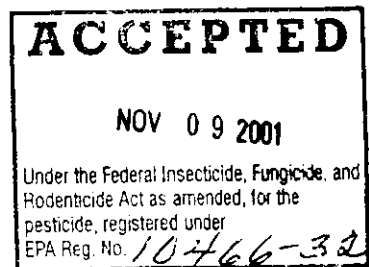
**WASTE DISPOSAL PROCEDURES**

Dilute with a suitable flammable solvent, then incinerate in approved equipment. Contaminated diking material should be land filled according to local, state, and federal regulations. Drums should be damaged to prevent reuse.

**BIODEGRADABILITY IN EFFLUENTS**

River water die-away tests at an initial concentration of 1 ppm of active ingredient showed 40 to 100 percent of mildewcide was destroyed within one month. The active ingredient was also strongly absorbed by clays and soil. No hazardous accumulation was observed in fish exposed to water containing the active ingredient.

In activated sludge tests, only 1 percent of the initial active ingredient appeared in the effluent from the sludge. About 58% was absorbed in the sludge and at least 30% was degraded to innocuous gases and harmless simple materials soluble in the effluent.



**NOTICE**

The technical information and suggestions for use made herein are based on TRA's research and experience and are believed to be reliable, but such information and suggestions do not constitute a warranty, and no patent liability can be assumed. Since TRA has no control over the conditions under which this product is transported, stored, handled, used or applied, it is TRA's intent that its liability on any basis be limited to the price of the product used.