

**MATERIAL SAFETY DATA SHEET**

REVISED December, 2001

**DeltaSafe D Scale Industrial Descaler****PRODUCT INFORMATION**

**TRADE NAMES OR SYNONYMS:** *Safe D Scale Industrial Descaler*  
**FORMULA:** PROPRIETARY, CONFIDENTIALITY REQUIRED  
**CHEMICAL FAMILY:** WATER SCALE, LIME & RUST SOLUTION

**ACTIVE INGREDIENTS**

MATERIAL OR COMPONENT	APPROXIMATE %
HYDROGEN CHLORIDE, AQUEOUS	LESS THAN 10
DELTA PROPRIETARY COMPOUNDS	LESS THAN 7
AMINE PENETRANT MIXTURE	LESS THAN 12

**NOTE:** This material is an aqueous organic solution and as such should **NOT** be considered hazardous under normal use conditions. Laboratory tests indicate material to be BIODEGRADABLE when used as directed. USDA has authorized this product for use in plants under their jurisdiction. A3 Cleaners with no food contact.

**SARA TITLE III & TSCA**

**Section 302 Extremely Hazardous Substances or Section 313 Toxic Chemicals:** None  
**ALL components of this product are listed on the TSCA list of controlled substances.**

**PHYSICAL DATA**

**BOILING POINT:** AROUND 213° F  
**SOLUBILITY IN WATER:** COMPLETE  
**SPECIFIC GRAVITY, (WATER = 1):** 1.046  
**VAPOR PRESSURE:** 30 TORR.  
**VAPOR DENSITY, (AIR = 1):** GREATER THAN 1  
**PERCENT VOLATILE BY VOLUME:** 99.6%  
**APPEARANCE:** DARK LIQUID WITH PRECIPITATE  
**ODOR:** CHARACTERISTIC  
**FREEZING POINT:** AROUND 30° F  
**PHYSICAL STATE:** LIQUID

**FIRE AND EXPLOSION HAZARD DATA**

**FLASH POINT:** NO FLASH POINT, EXTINGUISHES FLAME.  
**EXTINGUISHING MEDIA:** DOES NOT SUPPORT COMBUSTION.  
**SPECIAL FIRE FIGHTING PROCEDURES:** NONE- WATER WILL CONTROL, AS WILL CO<sub>2</sub>  
**UNUSUAL FIRE & EXPLOSION HAZARDS:** NON-COMBUSTIBLE OR EXPLOSIVE.  
**HEALTH:** 0  
**FLAMMABILITY:** 0  
**REACTIVITY:** 0  
**PERSONAL PROTECTION:** A GLASSES

## HEALTH HAZARD DATA

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**THRESHOLD LIMIT VALUE:** NONE FOR TOTAL - MATERIAL IS AN AQUEOUS ORGANIC SOLUTION AND AS SUCH HAS LITTLE VAPOR PRESSURE. NO NOXIOUS FUMES ARE GENERATED FROM ITS USE.

**EFFECTS OF OVEREXPOSURE:** NOT CONSIDERED HAZARDOUS WHEN USED AS DIRECTED.

**EMERGENCY FIRST AID PROCEDURES:** IF EYE/SKIN CONTACT, COPIOUS WATER RINSE. CONSULT A PHYSICIAN. NOT TO BE TAKEN INTERNALLY. IF INGESTED- DO NOT INDUCE VOMITING - DRINK MILK, EGG WHITES, ETC. AS DIRECTED BY PHYSICIAN. WASH WITH SOAP AFTER USE.

## REACTIVITY DATA

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**STABILITY:** STABLE

**INCOMPATIBILITIES (MATERIALS TO AVOID):** STRONG CAUSTICS AND/OR BLEACH PRODUCTS

**HAZARDOUS DECOMPOSITION PRODUCTS:** NONE

**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR

**CONDITIONS TO AVOID:** EXCESSIVE HEATING OVER 120° F

## SPILL AND DISPOSAL PROCEDURES

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**ACTION TO TAKE FOR SPILLS:** RINSE WITH COPIOUS AMOUNTS OF WATER TO DILUTE TO DRAIN.

**DISPOSAL METHOD:** EXPENDED PRODUCT MAY BE DISPOSED DOWN SEWER WITH WATER FLUSH PER LOCAL REGULATIONS. THIS MATERIAL IS **BIODEGRADABLE**.

## SPECIAL HANDLING INFORMATION

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**VENTILATION:** 1. **LOCAL EXHAUST:** NORMAL  
2. **MECHANICAL (GENERAL):** SUFFICIENT  
3. **RESPIRATORY PROTECTION (TYPE):** NONE REQUIRED

**PROTECTIVE GLOVES:** AS RECOMMENDED BY SAFETY DEPARTMENT.

**EYE PROTECTION:** AS RECOMMENDED BY SAFETY DEPARTMENT.

**OTHER PROTECTIVE EQUIPMENT:** NONE REQUIRED, BUT DO AS RECOMMENDED BY SAFETY.

## SPECIAL PRECAUTIONS

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**HANDLING AND STORING:** NONE REQUIRED

**CAN MATERIAL BE STORED OUTSIDE?** YES, MAINTAIN MATERIAL BETWEEN 30°-120° F

**OTHER PRECAUTIONS:** Do not circulate material for more than a four hour period without consulting the manufacturer. Most **Safe D Scale** cleanings may be accomplished in an average of two hours. Please use material only as directed. Use **Safe D Scale** at an ambient temperature. Do not pressurize circulating solution or elevate temperature above 120° F. Test on small hidden sample area for any compatibility concerns.

The suitability of this product for one's intended purpose is left to the user's judgement and responsibility. For additional product information, please contact Delta Products. This data is furnished independent of any sales of the product only for your investigation and independent verification. While information is believed to be correct, manufacturer shall in no event be responsible for any damage whatsoever, directly or indirectly, resulting from the publication or use of or reliance upon data contained herein. No warranty, either expressed or implied, of any merchantability, of fitness, or of any nature with respect to the product, or to the data, is made herein. This revised report complies with MSDS rules and is in accordance with 29 CFR 1910.1200-1500 Hazardous Communication Act effective November 25, 1985 including Subpart Z.