

MATERIAL SAFETY DATA SHEET

MSDS Q-177 REVISION 1

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SUBSTANCE IDENTIFICATION

SUBSTANCE: STAIN REMOVER

TRADE NAMES/SYNONYMS: **ZOUT® LAUNDRY STAIN REMOVER - SPRAY**
ZOUT® LAUNDRY STAIN REMOVER - LIQUID

CHEMICAL FAMILY: Mixture

I.D. NUMBERS: 99101756 ; 99102476

NFPA RATINGS (Scale 0-4, where 4=high degree of hazard): HEALTH=1 FLAMMABILITY= 0 REACTIVITY= 0
HMIS RATINGS (Scale 0-4, where 4=severe hazard): HEALTH=1 FLAMMABILITY= 0 REACTIVITY= 0

This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission. The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration applicable to this Material Safety Data Sheet differ from the requirements of the CPSC and as a result, this MSDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

HAZARDOUS INGREDIENTS INFORMATION

COMPONENT: AMYLASE ENZYME	CAS# 9000-90-2
COMPONENT: BORIC ACID	CAS# 10043-35-3
COMPONENT: LINEAR ALCOHOL ETHOXYLATES	CAS# 68131-39-5, 68951-67-7
COMPONENT : PROPYLENE GLYCOL	CAS# 57-55-6
COMPONENT: PROTEASE ENZYME	CAS# 9014-01-1

Subtilisins (as crystalline active enzyme)
0.00006 mg/m³ ACGIH Ceiling Limit

Carcinogen status of components: Not listed as carcinogenic by NTP, IARC, or OSHA.

PHYSICAL AND CHEMICAL DATA

DESCRIPTION: Clear liquid, colorless or water white to very slightly yellow with a solvent/ and fatty surfactant odor.

SPECIFIC GRAVITY @ 25°C: 1.00 – 1.02 pH@ 25°C: 7.6 – 8.4

VISCOSITY @ 25°C: 100-4000 cps (Brookfield LVF, #3 Spindle - 12 rpm)

SOLUBILITY IN WATER: Completely miscible.

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD – Negligible fire hazard.

FIRE FIGHTING MEDIA - Dry chemical, carbon dioxide, water spray or regular foam.

FIRE FIGHTING - Move container from fire area if you can do it without risk. Dike fire-control water for later disposal. Use agents suitable for type of surrounding fire. Avoid breathing hazardous vapors, keep upwind.

HEALTH HAZARD DATA

NOTE: The acute health effects described below are those, which could potentially occur for the finished product. They are based on the toxicology information available for the finished product and/or each hazardous ingredient, and are consistent with the product type and the likelihood of a specific route of exposure. Known chronic health effects related to exposure to a specific ingredient are indicated.

ACUTE HEALTH EFFECTS:

- INHALATION:** Unlikely to occur given the physical properties of the product. Mists may cause respiratory tract irritation. May cause sensitization by inhalation. Avoid inappropriate handling, which may result in aerosol/dust generation.
- SKIN CONTACT:** Repeated or prolonged excessive exposure can result in defatting and drying of the skin, which may result in irritation and dermatitis.
- EYE CONTACT:** May cause moderate to severe irritation, with possibility of corneal injury if not removed promptly.
- INGESTION:** Large quantities may cause nausea, vomiting, abdominal pain, diarrhea, and lethargy.

CHRONIC HEALTH EFFECTS:

No chronic health effects are expected from the intended use of these products or from foreseeable handling of them in the workplace. Nonetheless, the following effects have been reported for a component, sodium borate, and boric acid. Sodium borate upon entry into the body becomes boric acid.

Boric Acid: Boric acid interferes with sperm production, damage the testes and interfere with male fertility when given to animals by mouth at high doses. Boric acid produces developmental effects, including reduced body weight, malformations and death, in the offspring of pregnant animals given boric acid by mouth.

The above-mentioned animal studies were conducted under exposure conditions leading to doses many times in excess of those that could occur through product use or inhalation of dust in occupational settings. Moreover, a human study of occupational exposure to boric acid dust showed no adverse effect on fertility.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE: Persons with pre-existing skin conditions, asthma, or respiratory allergies.

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Remove from exposure area to fresh air immediately. Keep affected person warm and at rest. Treat symptomatically and supportively. Contact physician or local poison control center. If breathing has stopped, give artificial respiration, and get medical attention immediately.

SKIN CONTACT: Rinse affected area with soap and plenty of water until no evidence of product remains. Get medical attention if irritation persists.

EYE CONTACT: Immediately rinse eyes with plenty of water, occasionally lifting upper and lower lids, until no evidence of product remains. Get medical attention if pain or irritation persists.

INGESTION: Treat symptomatically and supportively. Maintain airway and respiration. If vomiting occurs, keep head below hips to prevent aspiration. Dilution by rinsing the mouth and giving water or milk to drink is generally recommended. If unconscious, the victim should not be given anything to drink. Contact physician or local poison control center.

REACTIVITY

REACTIVITY - Stable under normal temperatures and pressures.

INCOMPATIBILITIES: Strong oxidizers and reducing agents.

DECOMPOSITION - Thermal decomposition products may release toxic and/or hazardous gases.

POLYMERIZATION - Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

STORAGE AND DISPOSAL

Store away from incompatible substances and excessive heat. Observe all federal, state and local regulations when storing or disposing of this substance.

CONDITIONS TO AVOID

Avoid contact with incompatible substances or excessive heat. Do not expose product to high heat for long periods of time to avoid reduction of enzyme activity. Avoid formation of aerosols or mists.

SPILL AND LEAK PROCEDURES

OCCUPATIONAL SPILL - Stop leak if you can do it without risk. For small spills, take up with sand or other absorbent material and place into clean, dry containers for later disposal. For larger spills, dike far ahead of spill for later disposal. Keep unnecessary people away and isolate hazard area.

OCCUPATIONAL PROTECTIVE EQUIPMENT

VENTILATION - Provide local exhaust or general dilution ventilation meet permissible exposure limits, where aerosols or mists are likely to be generated.

RESPIRATOR - None required under normal use conditions.

FOR FIRE FIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS -

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode. Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

CLOTHING - Protective clothing (impervious to liquids) is required where splashing of product may occur.

GLOVES - Chemical-resistant gloves are required where repeated or prolonged skin contact may occur.

EYE PROTECTION - Splash-proof safety glasses are required to prevent eye contact where splashing of product may occur.

REGULATORY INFORMATION

DOT FLAMMABILITY CLASSIFICATION:	Not applicable.
EPA - SARA TITLE III SECTION 313:	Not applicable - Consumer product.
TSCA:	All components of this product are listed or are exempted or excluded from listing on the U.S. Toxic Substances Control Act (TSCA) chemical substance inventory.

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, The Dial Corporation makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, The Dial Corporation will not be responsible for damages of any kind resulting from the use of or reliance upon such information. No representations, or warranties, either expressed or implied of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information set forth herein or to the product to which the information refers.

MSDS CREATION DATE: 09/28/04

SUPERCEDES: Rev. 0, 09/28/04

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REVISION: Added ID Number, updated Hazardous Ingredient Information and Physical & Chemical Data sections.