

MATERIAL SAFETY DATA SHEET



NOTE: This Material Safety Data Sheet (MSDS) is prepared for industrial/commercial use situations. The preparation of this MSDS may be required by law but this is not an assertion that this product presents a risk in the normal consumer use situation.

1. PRODUCT IDENTIFICATION

PRODUCT (AS LABELED): Surf® Ultra Laundry Detergent - Power Fresh™, All Varieties

GENERAL USE: A Concentrated Liquid Laundry Detergent for Consumers, Original Scent, Spring Burst and Bright Sky Bleaching Action

MANUFACTURER'S NAME: Unilever Home & Personal Care, USA

ADDRESS: 33 Benedict Place
Greenwich, CT 06830

BUSINESS PHONE: 1-800-598-1223

FORMULATION DATE: 3/2/2000

PRODUCT NUMBER#: CB485027

2. COMPOSITION and INFORMATION ON INGREDIENTS

INGREDIENTS: Water, cleaning agents (anionic and nonionic surfactants), buffering agent, stabilizer, perfume, brightening agent and colorants. Surf contains no phosphorous. The surfactants in Surf are biodegradable.

EXPOSURE LIMITS IN AIR*

CHEMICAL NAME:	CAS#	ACGIH		OSHA	
		TLV mg/m ³	STEL mg/m ³	PEL mg/m ³	STEL mg/m ³
Sodium alkyl benzene sulfonate	68411-30-3	NA	NA	NA	NA
Alcohol ethoxylate	68131-39-5	NA	NA	NA	NA
Sodium silicate	1344-09-8	NA	NA	NA	NA
Sodium xylene sulfonate	1300-72-7	NA	NA	NA	NA

NA = Not Applicable

*See Section 12. for DEFINITION OF TERMS

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Caution: Eye irritant. In case of eye contact, flush well with water. Call a physician. Keep Out of Reach of Children. This product is a perfumed, liquid detergent. Material may be slippery if spilled.

POTENTIAL HEALTH EFFECTS:

CONTACT WITH EYES: Can cause irritation and discomfort.

CONTACT WITH SKIN: No irritation with brief contact. Possible irritation from prolonged or repeated contact.

INGESTION: May cause gastrointestinal irritation with nausea, vomiting, and delayed diarrhea.

INHALATION: While inhalation of a product mist is unlikely, such exposure may cause upper respiratory irritation.

CHRONIC HEALTH EFFECTS: None expected.

CONSUMER PRODUCT PRECAUTIONARY STATEMENT: "CAUTION: Eye irritant. In case of eye contact, flush well with water. Call a physician. KEEP OUT OF REACH OF CHILDREN."

4. FIRST-AID MEASURES

SKIN EXPOSURE: Rinse with water.

EYE EXPOSURE: Rinse with water for 15 minutes and seek medical attention.

INHALATION: Move individual to fresh air.

INGESTION: Do not induce vomiting. Drink a glass of milk or water and seek medical attention.

Note: If symptoms persist, seek medical attention.

5. FIRE-FIGHTING MEASURES

FLASH POINT: No flash to 200°F.

AUTOIGNITION TEMPERATURE: Not applicable.

FLAMMABLE LIMITS (in air by volume %): Not applicable.

FIRE EXTINGUISHING MATERIALS:

Water Spray: Yes

Carbon Dioxide: Yes

Foam: Yes

Dry Chemical: Yes

Halon: Yes

UNUSUAL FIRE AND EXPLOSION HAZARDS: Product is not flammable. Use appropriate fire extinguishing agent for the packaging material.

SPECIAL FIRE FIGHTING PROCEDURES: None.

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Disposal is to be performed in compliance with applicable laws. Small or household quantities may be disposed of in refuse or sewer. Product contains biodegradable ingredients. For large (industrial) releases, prevent spill from entering a waterway. Absorbent materials may be used. Material may be slippery if spilled.

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: Use personal protective equipment appropriate for the task.

STORING AND HANDLING PRACTICES: None required with normal use.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Use personal protective equipment when contact is likely.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation. Mechanical ventilation not normally required during normal operations.

EYE PROTECTION: Wear safety glasses.

HAND PROTECTION: Wear rubber gloves for prolonged contact.

BODY PROTECTION: None required.

9. PHYSICAL and CHEMICAL PROPERTIES

VAPOR DENSITY: Not determined.

SPECIFIC GRAVITY: 1.04 - 1.07

SOLUBILITY IN WATER: Completely miscible.

VAPOR PRESSURE, mm Hg @ 20°C: Approximately 18

APPEARANCE AND COLOR: This liquid is a pleasant smelling, colored, slippery solution.

EVAPORATION RATE (water=1): 1

MELTING POINT OR RANGE: < 0°C

BOILING POINT: >100°C

pH (1% solution): 9.5 - 10.5

10. STABILITY and REACTIVITY

STABILITY: Stable.

DECOMPOSITION PRODUCTS: None.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong acids, strong oxidizers.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Contact with strong acids, strong oxidizers.

11. TRANSPORTATION INFORMATION

THIS MATERIAL IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME:

Not applicable.

HAZARD CLASS NUMBER and DESCRIPTION:

Not applicable.

UN IDENTIFICATION NUMBER:

Not applicable.

PACKING GROUP:

Not applicable.

DOT LABEL(S) REQUIRED:

Not applicable.

EMERGENCY RESPONSE GUIDE NUMBER:

Not applicable.

MARINE POLLUTANT:

Not applicable.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: THIS MATERIAL IS NOT CLASSIFIED AS "DANGEROUS GOODS".

12. OTHER INFORMATION

PREPARED

Unilever HPC USA

BY:

New York, NY 10022

April 12, 2000

The information contained in this MSDS is based on data which is believed to be accurate. While Unilever HPC USA believes that the data contained herein comply with 29 CFR 1910.1200, they are not to be taken as a warranty or representation for which Unilever HPC USA assumes legal responsibility. They are offered solely for your consideration and verification. This MSDS is not prepared for consumer use situations.

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these which are commonly used include the following: CAS #: This is the Chemical Abstract Service Number which uniquely identifies each constituent. It is used for computer-related searching. EXPOSURE LIMITS IN AIR: ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits. TLV - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average (TWA), the 15-minute Short Term Exposure Limit (STEL), and the instantaneous Ceiling Level. Skin adsorption effects must also be considered.

OSHA - U.S. Occupational Safety and Health Administration. PEL - Permissible Exposure Limit - this exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. NIOSH is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (OSHA). NIOSH issues exposure guidelines called Recommended Exposure Levels (RELs). FLAMMABILITY LIMITS IN AIR: Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA). LEL - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. NA = Not Applicable.