

Material Safety Data Sheet



TRI-STAR FLEXYLITE

Section 1. Chemical product and company identification

Trade name : TRI-STAR FLEXYLITE
Product use : Laundry detergent
Supplier : Ecolab Inc. Institutional Division
370 N. Wabasha Street
St. Paul, MN 55102
1-800-352-5326
Code : 905222-02
Date of issue : 18-August-2005

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Composition, Information on Ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	5 - 20
alcohols, c12-14-secondary, ethoxylated	84133-50-6	1 - 5
triethanolamine	102-71-6	1 - 5
poly[oxy(methyl-1,2-ethanediy)], .alpha.-[2-(diethylmethylammonio)ethyl]-.omega.-hydroxy-, chloride	68132-96-7	1 - 5
poly(oxy-1,2-ethanediy), .alpha.-(carboxymethyl)-.omega.-hydroxy-,c12-13-alkyl ethers	70750-17-3	1 - 5

Section 3. Hazards identification

Physical state : Liquid. (slurry)
Emergency overview : CAUTION!

MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
Avoid contact with skin and clothing. Avoid breathing vapor or mist. Keep container closed.
Use only with adequate ventilation. Wash thoroughly after handling.

Potential acute health effects

Eyes : Moderately irritating to the eyes.
Skin : Moderately irritating to the skin. May cause sensitization by skin contact.
Inhalation : Moderately irritating to the respiratory system.
Ingestion : No known significant effects or critical hazards.
See toxicological Information (section 11)

Section 4. First aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

Skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Inhalation : If inhaled, remove to fresh air.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Section 5. Fire fighting measures

- Flash point** : > 100°C
Product does not support combustion.
- Products of combustion** : These products are halogenated compounds, hydrogen chloride.
- Fire fighting media and instructions** : Use an extinguishing agent suitable for surrounding fires.
Dike area of fire to prevent product run-off.
No specific hazard.
- Special protective equipment for fire-fighters** : Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions** : Ventilate area of leak or spill. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8). Stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.--

Section 7. Handling and storage

- Handling** : Avoid contact with eyes, skin and clothing. Do not add water directly to product. Slowly stir product into water. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Wash thoroughly after handling.
- Storage** : Keep out of the reach of children. Keep container tightly closed. Keep container in a cool, well-ventilated area.
Store between 50 and 0°C

Section 8. Exposure Controls, Personal Protection

- Engineering controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

Personal protection

- Eyes** : Eye protection recommended.
- Hands** : Use chemical resistant, impervious gloves.
- Skin** : No protective equipment is needed under normal use conditions.
- Respiratory** : Avoid breathing vapor or mist.

Name

triethanolamine

Exposure limits

ACGIH TLV (United States, 1/2004).

TWA: 5 mg/m³ 8 hour(s). Form: All forms

Section 9. Physical and chemical properties

- Physical state** : Liquid. (slurry)
- Color** : Red.
- Odor** : Fragrance like.
- pH** : 12.8 (100%)
- Boiling/condensation point** : >100 °C
- Specific gravity** : 1.11 (Water = 1)
- Viscosity** : Dynamic: 325 cP
- Dispersion properties** : Easily dispersed in hot water.
Dispersed in cold water.
- Solubility** : Easily soluble in hot water.
Soluble in cold water.

Section 10. Stability and reactivity

- Stability** : The product is stable.
- Reactivity** : Reactive with acids.
Slightly reactive to reactive with organic materials, metals.
- Hazardous decomposition products** : These products are halogenated compounds, hydrogen chloride.

Section 11. Toxicological information

Potential acute health effects

- Eyes** : Moderately irritating to the eyes.
- Skin** : Moderately irritating to the skin. May cause sensitization by skin contact.
- Inhalation** : Moderately irritating to the respiratory system.
- Ingestion** : No known significant effects or critical hazards.
- Chronic effects on humans** : Contains material which causes damage to the following organs: eye, lens or cornea.

Section 12. Ecological information

- Products of degradation** : These products are carbon oxides (CO, CO₂) and water, nitrogen oxides (NO, NO₂ ...), halogenated compounds. Some metallic oxides.

Section 13. Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

- Waste classification** : Unused product is D002 (Corrosive)

Consult your local or regional authorities.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional information
DOT Classification	Not regulated.	-	-	-	-

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

- HCS Classification** : Irritating material
Sensitizing material
Target organ effects
- U.S. Federal regulations** : SARA 302/304/311/312 extremely hazardous substances: None.
SARA 302/304 emergency planning and notification: None.
- TSCA 8(b) inventory** : All materials are listed or exempt.
- California prop. 65** : No products were found.

Section 16. Other information

Hazardous Material Information System (U.S.A.) :	Health *	1
	Fire hazard	0
	Reactivity	0
	Personal protection	B

Date of issue : 18-August-2005.
 Responsible name : Regulatory Affairs
 Date of previous issue : No Previous Validation.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.