



Material Safety Data Sheet

Revision Date 08-Jul-2014

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Label Name Kirkland Signature Liquid Laundry Detergent - Free & Clear HE 194oz
UPC Code 96619126453
Product Type FABRIC CLEANING LIQUID
Recommended Use Laundry detergent liquid for clothes washing machines.

Supplier Address
Sun Products Corporate Office
60 Danbury Road
Wilton, CT 06897
USA

Chemical Emergency Phone Number Poison Control 1-800-222-1222 (24 hour)
Chemtrec (US/CA) 1-800-424-9300 (24 hour)
Chemtrec (Global) 1-703-527-3887 (24 hours)

Company Emergency Phone Number Prosar: 1-800-565-5597 (24 hours)

General Questions: General - 1-800-776-6702 (Monday – Friday, 8:30AM to 6:00PM EST)
XCONG

2. HAZARDS IDENTIFICATION

ATTENTION

Emergency Overview

Keep out of the reach of children
May cause adverse kidney effects
May cause central nervous system depression

Potential Health Effects

See Section 11 for additional Toxicological information.

Ingestion Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Do not taste or swallow.

Eyes May cause slight irritation. Avoid contact with eyes.

Skin Substance may cause slight skin irritation.

Inhalation May be harmful if inhaled.

Chronic Effects Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

Aggravated Medical Conditions Preexisting eye disorders. Kidney disorders. Skin disorders. Respiratory disorders. Central nervous system. Blood disorders. Liver disorders. Overexposure may cause female and male reproductive disorder(s). Reproductive toxicity.

Environmental hazard See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients as defined by the OSHA Hazard Communication Standard (29CFR § 1910.1200).

Chemical Name	CAS-No	Weight %
C12-C15 Alcohol Ethoxylate	68131-39-5	10-30
BENZENESULFONIC ACID, C10-16-ALKYL DERIVATIVES, SODIUM SALTS	68081-81-2	1 - 5 %
Ethyl alcohol	64-17-5	1 - 5 %
TRIETHANOLAMINE	102-71-6	1 - 5 %

Under normal consumer household use, this product would not constitute a hazardous product by OSHA definition as OSHA is not applicable to household consumer use.

4. FIRST AID MEASURES

General advice	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin contact	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Inhalation	Move to fresh air. Consult a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Ingestion	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.
Notes to physician	Treat symptomatically.
Protection of First-aiders	Use personal protective equipment.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable.
Flash point	> 201 °F / > 94 °C
Flammability Limits in Air	
Upper Flammability Limit	No information available
Lower Flammability Limit	No information available
Autoignition temperature	No information available
Hazardous Combustion Products	None.
Explosive properties	No information available
Explosion Limits	
Upper	No information available
Lower (LEL)	No information available
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	Health hazard 1	Flammability 1	Stability 0	Physical and chemical hazards - Personal protection -
HMIS	Health hazard 1	Flammability 1	Physical Hazard 0	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Ensure adequate ventilation.

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Cover liquid spill with sand, earth or other noncombustible absorbent material. Use personal protective equipment. Dam up. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly.

Other information Not applicable.

7. HANDLING AND STORAGE

Advice on safe handling Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Do not breathe vapors or spray mist. Do not eat, drink or smoke when using this product.

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
TRIETHANOLAMINE 102-71-6	TWA: 5 mg/m ³		
Subtilisin 9014-01-1	Ceiling: 0.00006 mg/m ³ as crystalline active enzyme	(vacated) STEL: 0.00006 mg/m ³ 60 min	STEL: 0.00006 mg/m ³ 60 min Subtilisins

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering Measures None under normal use conditions

Personal Protective Equipment

Eye/Face Protection

Tightly fitting safety goggles

Skin and body protection

No protective equipment is needed under normal use conditions.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid	Appearance	CLEAR LIQUID
Color	colorless	Odor	FREE OF PERFUME
Odor Threshold	No information available	pH	7.800 pH.
Specific Gravity	1.062 SPECIFIC GRAVITY - 20C	Density	No data available
Viscosity, kinematic	600.000 cps viscosity	Flash point	> 201 °F / > 94 °C
Method	No information available	Autoignition temperature	No information available
Decomposition temperature	No data available	Boiling point/boiling range	No data available
Melting point	No data available	Freezing Point	No data available
Water solubility	Soluble in water	Evaporation rate	No data available
Vapor pressure	No data available	Vapor density	No data available
VOC Content(%)	3.04337000846863		
Flammability Limits in Air		Explosion Limits	
Upper Flammability Limit	No data available	Upper	No data available
Lower Flammability Limit	No data available	Lower (LEL)	No data available

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Incompatible products	Strong oxidizing agents, strong acids, and strong bases.
Conditions to Avoid	Extremes of temperature and direct sunlight. Do not freeze.
Hazardous Decomposition Products	None known based on information supplied.
Hazardous Reactions	None known based on information supplied.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Ingestion	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Do not taste or swallow.
Eye contact	May cause slight irritation. Avoid contact with eyes.
Skin contact	Prolonged skin contact may cause skin irritation.
Inhalation	May cause irritation of respiratory tract.
Product Safety Profile	Product is safe for its intended use based on the formulation, testing results, and the long history of safe consumer use.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
C12-C15 Alcohol Ethoxylate	= 2 g/kg (Rat)	2 g/kg (Rabbit)	
BENZENESULFONIC ACID, C10-16-ALKYL DERIVATIVES, SODIUM SALTS	1000 mg/kg (Rat)	1000 mg/kg (Rabbit)	
Ethyl alcohol	= 7060 mg/kg (Rat)		= 124.7 mg/L (Rat) 4 h
TRIETHANOLAMINE	= 4190 mg/kg (Rat)	> 20 mL/kg (Rabbit) > 16 mL/kg (Rat)	

Chronic toxicity

Chronic toxicity Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethyl alcohol	A3	Group 1	Known	X
TRIETHANOLAMINE		Group 3		

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Sensitization None known.

Germ Cell Mutagenicity None known.

Reproductive toxicity This product does not contain any known or suspected reproductive hazards

Developmental Toxicity None known

Target Organ Effects Eyes, Kidney, Respiratory system, Skin, Blood, Central nervous system, Liver, Reproductive system

Interactions with Other Chemicals Use of alcoholic beverages may enhance toxic effects

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Ethyl alcohol		100: 96 h Pimephales promelas mg/L LC50 static 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	2: 48 h Daphnia magna mg/L EC50 Static 9268 - 14221: 48 h Daphnia magna mg/L LC50
TRIETHANOLAMINE	169: 96 h Desmodesmus subspicatus mg/L EC50 216: 72 h Desmodesmus subspicatus mg/L EC50	10600 - 13000: 96 h Pimephales promelas mg/L LC50 flow-through 450 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 1000: 96 h Pimephales promelas mg/L LC50 static		

Persistence and degradability No data is available on the product itself.

Bioaccumulation Not likely to bioaccumulate.

Mobility Not Determined .

Chemical Name	log Pow
Ethyl alcohol	-0.32

TRIETHANOLAMINE	-2.53
-----------------	-------

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements

Contaminated packaging Do not re-use empty containers

California Waste Status
This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Ethyl alcohol	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT Not regulated
TDG Not regulated
MEX Not regulated
IATA Not regulated
IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA -
DSL -

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Ethyl alcohol	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethyl alcohol	X	X	X	X	
TRIETHANOLAMINE	X	X	X		
Magnesium Nitrate	X	X	X	X	

Mexico

Mexico - Grade Slight risk, Grade 1

Chemical Name	Carcinogen Status	Exposure Limits
Ethyl alcohol		Mexico: TWA 1000 ppm Mexico: TWA 1900 mg/m ³

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

- D2A Very toxic materials
- D2B Toxic materials



16. OTHER INFORMATION

Prepared By Sun Products Corporation
Regulatory Affairs

Revision Date 08-Jul-2014
Revision Note No data available.
Status 2
Product code 197004340
PROTYP E

Disclaimer

The (M)SDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Sun Products Corporation to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. Sun Products Corporation assumes no responsibility for injury to the recipient of third persons, or for any damage to any property resulting from misuse of the product.

End of Material Safety Data Sheet