



Material Safety Data Sheet

Revision Date 19-Sep-2012

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Label Name Kirkland Signature Single Dose Laundry Pacs - Fresh 90ct
Product name KIRKLAND SIGNATURE 1/90CT SDL FRESH
UPC Code 10096619674982
Recommended Use Laundry single dose liquid pack for clothes washing machines.

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

Chemical Emergency Phone Number Chemtrec 1-800-424-9300 (24 hour)
 Poison Control 1-800-222-1222 (24 hour)

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

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

2. HAZARDS IDENTIFICATION

CAUTION!

Emergency Overview

Harmful if swallowed
 May cause eye irritation
 Keep out of the reach of children
 May cause central nervous system depression

Potential Health Effects

See Section 11 for additional Toxicological information.

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

Eyes Irritating to eyes. May cause redness, itching, and pain.

Skin Substance may cause slight skin irritation. Prolonged or repeated contact may dry skin and cause irritation.

Inhalation May be harmful if inhaled. May cause irritation of respiratory tract.

Chronic Effects No known effect based on information supplied.

Aggravated Medical Conditions Central nervous system. Preexisting eye disorders. Skin disorders. Respiratory disorders.

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	30-60
BENZENESULFONIC ACID, C10-16-ALKYL DERIVATIVES, SODIUM SALTS	68081-81-2	10-30
Propylene Glycol	57-55-6	7-13
Ethanolamine	141-43-5	1 - 5 %
DISODIUM DISTYRYLBIPHENYL DISULFONATE	27344-41-8	0.1 - 1%

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	Consult a physician.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin contact	Wash skin with soap and water.
Inhalation	Move to fresh air.
Ingestion	Rinse mouth. Do NOT induce vomiting. Call a physician or Poison Control Center immediately.
Notes to physician	Treat symptomatically.

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 (UEL)	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 2 Flammability 1 Stability 0 Physical and chemical hazards -
HMIS Health Hazard 2 Flammability 1 Physical Hazard 0 Personal protection -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Ensure adequate ventilation.

Environmental precautions Try to prevent the material from entering drains or water courses.

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

Methods for cleaning up Use personal protective equipment. Dam up. Cover liquid spill with sand, earth or other noncombustible absorbent material. 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 Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanolamine 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 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

No protective equipment is needed under normal use conditions

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. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid	Appearance	LIQUID PACK
Color	blue	Odor	ORIGINAL
Odor Threshold	No information available	pH	7.6
Specific Gravity	1.02 SPECIFIC GRAVITY - 25C	Density	no data available
Viscosity, kinematic	160 cps	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(%)	16.35		
Flammability Limits in Air		Explosion Limits	
Upper Flammability Limit	no data available	Upper (UEL)	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	Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Do not taste or swallow.
Eye contact	Irritating to eyes. Avoid contact with eyes.
Skin contact	Causes skin irritation. Prolonged contact may cause redness and irritation. Prolonged or repeated contact may dry skin and cause 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.
LD50 Oral:	> 2000 mg/kg (rat)
LD50 Dermal:	> 2000 mg/kg

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
C12-C15 Alcohol Ethoxylate	2 g/kg (Rat)		
BENZENESULFONIC ACID, C10-16-ALKYL DERIVATIVES, SODIUM SALTS	1000 mg/kg (Rat)	730 mg/kg (Rabbit)	

Propylene Glycol	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	
Ethanolamine	1720 mg/kg (Rat)	1 mL/kg (Rabbit) 1025 mg/kg (Rabbit)	
DISODIUM DISTYRYLBIPHENYL DISULFONATE	2000 mg/kg (Rat)	2500 mg/kg (Rabbit) 1 g/kg (Rat)	3.6 mg/L (Rat) 4 h

Chronic toxicity

Chronic toxicity No known effect based on information supplied. May produce an allergic reaction.

Carcinogenicity Contains no ingredients above reportable quantities listed as a carcinogen

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 Central nervous system, Eyes, Respiratory system, Skin

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
Propylene Glycol	19000: 96 h Pseudokirchneriella subcapitata mg/L EC50	51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50		10000: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50 Static
Ethanolamine	15: 72 h Desmodesmus subspicatus mg/L EC50	227: 96 h Pimephales promelas mg/L LC50 flow-through 3684: 96 h Brachydanio rerio mg/L LC50 static 300 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 114 - 196: 96 h Oncorhynchus mykiss mg/L LC50 static 200: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	EC50 = 110 mg/L 17 h EC50 = 12200 mg/L 2 h EC50 = 13.7 mg/L 30 min	65: 48 h Daphnia magna mg/L EC50
DISODIUM DISTYRYLBIPHENYL DISULFONATE	10: 72 h Desmodesmus subspicatus mg/L EC50 10.0 - 11.0: 96 h Desmodesmus subspicatus mg/L EC50	76: 96 h Brachydanio rerio mg/L LC50 static		1000: 48 h Daphnia magna mg/L EC50

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

Bioaccumulation Not likely to bioaccumulate.

Mobility Not Determined .

Chemical Name	log Pow
Ethanolamine	-1.91

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

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL Complies

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	no
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 does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Propylene Glycol		X	X		
Ethanolamine	X	X	X	X	

Mexico**Mexico - Grade**

Slight risk, Grade 1

Chemical Name	Carcinogen Status	Exposure Limits
Ethanolamine		Mexico: TWA 3 ppm Mexico: TWA 8 mg/m ³ Mexico: STEL 6 ppm Mexico: STEL 15 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

D2B Toxic materials

Non-controlled



16. OTHER INFORMATION

Prepared By	Sun Products Corporation Regulatory Affairs
Revision Date	19-Sep-2012
Revision Note	no data available.
Status	-5
PROTYP	F50

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