SAFETY DATA SHEET

Conforms to regulation (EC) no. EU 453/2010

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: Ecoscint Ultra **Product Number:** LS-270

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer
National Diagnostics
305 Patton Drive
Atlanta, GA 30036
(404) 699-2121
(800) 526-3867
info@nationaldiagnostics.com

1.4 Emergency Telephone Number

ChemTel Inc.
Contract number MIS8894340
1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands)
01-800-099-0731 (Mexico)
400-120-0751 (China)
000-800-100-4086 (India)
1-300-954-583 (Australia)
0-800-591-6042 (Brazil)
+1-813-255-3924 (All other regions)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]
H304 - Aspiration Hazard (Category 1)
H315 - Skin Corrosion/Irritation (Category 2)
H319 - Serious Eye Damage/Eye Irritation (Category 2A)
H410 - Chronic Hazards to the Aquatic Environment (Category 1)

2.2 Label Elements

GHS LABEL ELEMENTS AND CLASSIFICATION

GHS Label Elements

DANGER
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H410 - Very toxic to aquatic life with long lasting effects.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P262 - Do not get into eyes, on skin or on clothing.
P273 - Avoid release to the environment.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P501 - Dispose of contents/container according to local regulations.

2.3 Other Hazards

None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Chemical Names/Description
Blend of nonionic surfactants and scintillators in solvent.

Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Bis(1-methylethyl) naphthalene	60 - 80%	38640-62-9		H304, H410
Butyl Dioxitol	5 - 10%	112-34-5	203-961-6	H319
Linear alkyl phenyl ethoxylates	20 - 40%	9016-45-9	500-024-6	H315, H319, H411

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion

DO NOT INDUCE VOMITING. If swallowed and the person is conscious, immediately give large amounts of water. Get medical attention.

Skin

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Bis(1-methylethyl) naphthalene:
Sore throat, coughing, labored breathing, sneezing and burning sensation, depending on the concentration and duration of exposure. May cause central nervous system depression or effects. Symptoms may include headache, excitation, euphoria, dizziness, incoordination, drowsiness, light-headedness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death, depending on the concentration and duration of exposure.

Butyl Dioxitol:
Burning in nose and throat, coughing. Headache, dizziness, drowsiness, fatigue, nausea.

Linear alkyl phenyl ethoxylates:
Discomfort in nose and throat, nasal discharge, coughing, difficulty breathing.

Ingestion

Bis(1-methylethyl) naphthalene:
Salivation, pain, nausea, vomiting and diarrhea. Exposure may also cause central nervous system symptoms similar to those listed under Inhalation.

Butyl Dioxitol:
Headache, dizziness, drowsiness, fatigue, nausea, vomiting.

Linear alkyl phenyl ethoxylates:
Abdominal discomfort, nausea, and diarrhea.

Skin

Bis(1-methylethyl) naphthalene:
Drying, reddening, itching, and cracking. Repeated or prolonged contact with large amounts of this material may result in absorption through the skin to produce toxic effects.

Butyl Dioxitol:
Redness, pain and itching.

Linear alkyl phenyl ethoxylates:
Local redness and swelling.

Eyes

Bis(1-methylethyl) naphthalene:
Redness, tearing, and blurred vision.

Butyl Dioxitol:
Redness, tearing, and pain.

Linear alkyl phenyl ethoxylates:
Excess blinking and tear production. Marked redness and swelling of the eye with injury to the cornea.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Water spray, dry chemical, alcohol-resistant foam, or carbon dioxide.

5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products

Fires involving this product may release carbon monoxide, carbon dioxide, reactive hydrocarbons and irritating vapors.

Hazardous Decomposition Products

Combustion may produce toxic oxides of carbon, nitrogen, sulfur and reactive hydrocarbons.

Hazardous Polymerization

Will not occur under normal conditions of use (see Sections 10.4 & 10.5)

5.3 Advice for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

5.4 Further Information

No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Wear appropriate protective equipment as specified in Section 8.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Eliminate source of ignition. Ventilate area. Cover with absorbent material (dry sand or earth) to confine spill and sweep or shovel into container. Close container tightly. Avoid breathing vapors.

6.4 References to Other Sections

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Transfer methods should avoid static sparks. Do not eat, drink, or smoke in areas of use or storage.

7.2 Conditions for Safe Storage (including any incompatibles)

Keep in a tightly closed container, stored in a cooled, dry, ventilated area away from sources of heat or ignition. Protect from physical damage.

Incompatibles

Bis(1-methylethyl) naphthalene:
Oxidizing agents.

Butyl Dioxitol:
Strong oxidizing agents.

Linear alkyl phenyl ethoxylates:
Oxidizing agents.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

Component: Bis(1-methylethyl) naphthalene
ACGIH Threshold Limit Value (TLV): none established
OSHA Permissable Exposure Limit (PEL): none established

Component: Butyl Dioxitol
ACGIH Threshold Limit Value (TLV): none established
OSHA Permissable Exposure Limit (PEL): None established

Component: Linear alkyl phenyl ethoxylates
ACGIH Threshold Limit Value (TLV): none established
OSHA Permissable Exposure Limit (PEL): None established

8.2 Exposure Controls

Engineering Controls

A system of local and/or general exhaust is recommended. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

Respiratory Protection

For conditions of use where exposure to the substance is apparent, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator.

Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection

Wear protective gloves and clean body covering clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Clear solution	**b. Odor**	Odorless
c. Odor Threshold		**d. pH**	NA
e. Melting/Freezing Point (^{O}C)	-30	**f. Boiling point (^{O}C)**	290
g. Flash Point (^{O}C)	>93	**h. Evaporation Rate**	MA
i. Flammability	N.A.	**j. Upper/Lower Flammability or Explosive Limits**	N.D.
k. Vapor Pressure	NA	**l. Vapor Density (Air = 1)**	NA
m. Relative Density	0.96	**n. Water Solubility**	Somewhat miscible
o. Partition Coefficient n-octanol/water	Mixture	**p. Autoignition Temperature (^{O}C)**	N.D.
q. Decomposition Temperature (^{O}C)	N.A.	**r. Viscosity**	No data available.
s. Explosive Properties	N.A.	**t. Oxidizing Properties**	N.A.

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Non reactive under normal conditions of use. Mixture of organic solvents-may react with strong oxidizers.

10.2 Chemical Stability

Stable under ordinary conditions of use and storage.

10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (see Sections 10.4 & 10.5)

10.4 Conditions to Avoid

Heat, sources of ignition.

10.5 Incompatible Materials

Bis(1-methylethyl) naphthalene:
Oxidizing agents.

Butyl Dioxitol:
Strong oxidizing agents.

Linear alkyl phenyl ethoxylates:
Oxidizing agents.

10.6 Hazardous Decomposition Products

Combustion may produce toxic oxides of carbon, nitrogen, sulfur and reactive hydrocarbons.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

No Data

Dermal Rabbit LD50 (mg/kg)

No Data

Component Cancer List Status

	NTP Carcinogen		
	Known	**Anticipated**	**IARC Category**
Bis(1-methylethyl) naphthalene	No	No	None

Butyl Dioxitol	No	No	None
Linear alkyl phenyl ethoxylates	No	No	None

Potential Health Effects

Inhalation

Bis(1-methylethyl) naphthalene
Breathing of the mists, vapors or fumes may irritate the nose, throat and lungs.

Butyl Dioxitol
This material does not normally present an inhalation hazard, however, in applications where vapors (caused by high temperature) or mists (caused by mixing) are created, breathing may cause a mild burning sensation in the nose, throat and lungs.

Linear alkyl phenyl ethoxylates
Vapors or mist, expecially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, may be irritating and cause discomfort in nose and throat. Prolonged exposure may cause difficulty breathing.

Ingestion

Bis(1-methylethyl) naphthalene
May cause irritation of the mouth, throat, and gastrointestinal tract. Exposure may also cause central nervous system symptoms.

Butyl Dioxitol
Liquid can directly enter the lungs (aspiration) when swallowed or vomited. Serious lung damage and possiblyfatal chemical pneumonia (chemical pneumonitis) can develop if this occurs.

Linear alkyl phenyl ethoxylates
May be harmful by ingestion.

Skin

Bis(1-methylethyl) naphthalene
May cause skin irritation.

Butyl Dioxitol
May be slightly irritating to the skin.

Linear alkyl phenyl ethoxylates
Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort.

Eyes

Bis(1-methylethyl) naphthalene
Exposure to vapors, fumes or mists may cause irritation. Direct contact may cause irritation.

Butyl Dioxitol
Irritating to the eyes causing a burning sensation, redness, swelling and/or blurred vision.

Linear alkyl phenyl ethoxylates
Causes irritation and possible injury to the cornea.

Carcinogenicity

Bis(1-methylethyl) naphthalene
Not listed by NTP or IARC as a known or possible carcinogen.

Butyl Dioxitol
Not listed as a known or anticipated carcinogen by NTP or IARC.

Linear alkyl phenyl ethoxylates
Not listed by NTP or IARC as a known or possible carcinogen.

Mutagenicity

Bis(1-methylethyl) naphthalene
No information available.

Butyl Dioxitol
No information found.

Linear alkyl phenyl ethoxylates
No information available.

Reproductive Toxicity

Bis(1-methylethyl) naphthalene
No information available.

Butyl Dioxitol
No information available.

Linear alkyl phenyl ethoxylates
No information available.

Teratogenic Effects

Bis(1-methylethyl) naphthalene
No information available.

Butyl Dioxitol
Has not been shown to cause birth defects.

Linear alkyl phenyl ethoxylates
No information available.

Routes of Entry

Bis(1-methylethyl) naphthalene
Ingestion, inhalation, skin contact.

Butyl Dioxitol
Inhalation, ingestion, skin contact.

Linear alkyl phenyl ethoxylates
Ingestion, inhalation.

Target Organ Statement

Bis(1-methylethyl) naphthalene
No information available.

Butyl Dioxitol
Preexisting skin, eye, and lung disorders may be aggravated by exposure.

Linear alkyl phenyl ethoxylates
No information available.

SECTION 12 - ECOLOGICAL INFOMATION

12.1 Toxicity

COMPONENT: Bis(1-methylethyl) naphthalene

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (golden orfe, 96 hr) 0.24 mg/L	Toxic: LC 50 (48 hrs)EL50 (48h) of 1.7mg/L	NOEC 0.15mg/L	No data

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

COMPONENT: Butyl Dioxitol

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (96 hr, bluegill) 1300 mg/L	EC50 948 hr daphnia) >100mg/L	EC50 > 100mg/L	EC10 (30 min) > 1995 mg/L

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

COMPONENT: Linear alkyl phenyl ethoxylates

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	LC50(48hrs, daphnia) 1.821 mg/L	EC50 (48hrs) 20 mg/L	No data

	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

12.2 Persistence and Degradability

Bis(1-methylethyl) naphthalene
>60% biodegradation in 28 days

Butyl Dioxitol
Readily biodegradable (>80% elimination after 28 days)

Linear alkyl phenyl ethoxylates
Readily biodegradable >97% elimination in 30 days

12.3 Bioaccumulative Potential

Bis(1-methylethyl) naphthalene
BCF 300-3000

Butyl Dioxitol
No data

Linear alkyl phenyl ethoxylates
No data

12.4 Mobility in Soil

Bis(1-methylethyl) naphthalene
log Koc 6.08

Butyl Dioxitol
No data

Linear alkyl phenyl ethoxylates
No data

12.5 Results of PBT and vPvB Assessment

Bis(1-methylethyl) naphthalene
Not PBT or vPvB

Butyl Dioxitol
not PBT or vPvB

Linear alkyl phenyl ethoxylates
Substance is PBT / vPvB

12.6 Other Adverse Effects

Bis(1-methylethyl) naphthalene
None

Butyl Dioxitol
None

Linear alkyl phenyl ethoxylates
None

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	UN3082	N.A.	UN3082	N.A.
14.2 Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S.	Not regulated.	Environmentally Hazardous Substance, Liquid, N.O.S.	Not regulated.
14.3 Hazard Class	9	N.A.	9	N.A.
14.4 Packing Group	III	N.A.	III	N.A.
14.5 Environmental Hazards	N.A.	N.A.	Marine pollutant	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

United States

TSCA Regulatory Statement
All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Bis(1-methylethyl) naphthalene	No	No	No	Yes	No
Butyl Dioxitol	No	No	No	No	No
Linear alkyl phenyl ethoxylates	No	No	No	Yes	No

Europe

EEC Regulatory
All intentional ingredients are listed on the European EINECS Inventory.

SECTION 16 - OTHER INFORMATION

Revisional Updates

4/26/2019 - Updated Section 1.4
1/28/2016 - Updated Sections 2.1, 3.2, 14.1, 14.2, 14.3, 14.4 and 14.5
5/29/2015 - Updated Sections 2.1 and 3.2
9/17/2013 - Released Version 1.0

NFPA Codes

Health 1 **Flammability** 1 **Reactivity** 0

Dangers

Bis(1-methylethyl) naphthalene

H304 - May be fatal if swallowed and enters airways.
H410 - Very toxic to aquatic life with long lasting effects.

Butyl Dioxitol

H319 - Causes serious eye irritation.

Linear alkyl phenyl ethoxylates

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H411 - Toxic to aquatic life with long lasting effects.