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 **Product Number:** LS-271

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

Chemtrec
1-800 424-9300 (U.S. & Canada)
01-703-527-3887 (outside U.S. & Canada)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]

H315 - Skin Corrosion/Irritation (Category 2)
H319 - Serious Eye Damage/Eye Irritation (Category 2A)
H360 - Toxic to Reproduction (Category 1B)
H412 - Chronic Hazards to the Aquatic Environment (Category 3)

2.2 Label Elements

GHS LABEL ELEMENTS AND CLASSIFICATION

GHS Label Elements



DANGER
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H360 - May damage fertility or the unborn child.
H412 - Harmful to aquatic life with long lasting effects.
P201 - Obtain special instructions before use.
P264 - Wash skin thoroughly after handling.
P273 - Avoid release to the environment.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

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 chiral phenylalkanes.

Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Nalkylene	70 - 85	67774-74-7		N.A.
Linear alkyl phenyl ethoxylates	15 - 30	9016-45-9	500-024-6	H315, H319, H411
1-methoxy-2-(2-methoxyethoxy)ethane	1 - 3	111-96-6		H226, H360

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 because of danger of aspiration in lungs. Get medical attention immediately. Adverse effects of aspiration into the lungs may be delayed up to 48 hours.

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
Nalkylene:
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.

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

1-methoxy-2-(2-methoxyethoxy)ethane:
No information available.

Ingestion
Nalkylene:
Salivation, pain, nausea, vomiting and diarrhea. Exposure may also cause central nervous system symptoms similar to those listed under Inhalation.

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

1-methoxy-2-(2-methoxyethoxy)ethane:
No information available.

Skin
Nalkylene:
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.

Linear alkyl phenyl ethoxylates:
Local redness and swelling.

1-methoxy-2-(2-methoxyethoxy)ethane:
No information available.

Eyes
Nalkylene:
Redness, tearing, and blurred vision.

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

1-methoxy-2-(2-methoxyethoxy)ethane:
No information available

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 Polymeriation

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

Nalkylene:
Oxidizing agents.

Linear alkyl phenyl ethoxylates:
Oxidizing agents.

1-methoxy-2-(2-methoxyethoxy)ethane:
No information found.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

Component: Nalkylene

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

Component: 1-methoxy-2-(2-methoxyethoxy)ethane

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 blue-violet fluorescent liquid	**b. Odor**	Odorless
c. Odor Threshold	N.A.	**d. pH**	N/D
e. Melting/Freezing Point (^{o}C)	0	**f. Boiling point (^{o}C)**	270-312
g. Flash Point (^{o}C)	>93	**h. Evaporation Rate**	Not measureable
i. Flammability	N.A.	**j. Upper/Lower Flammability or Explosive Limits**	ND
k. Vapor Pressure	< 0.1 mm HG	**l. Vapor Density (Air = 1)**	between 8 and 9
m. Relative Density	0.91	**n. Water Solubility**	30% by weight @ 20C
o. Partition Coefficient n-octanol/water	Mixture	**p. Autoignition Temperature (^{o}C)**	N.A.
q. Decomposition Temperature (^{o}C)	N.A.	**r. Viscosity**	ND
s. Explosive Properties	Can be made to burn	**t. Oxidizing Properties**	Not an oxidizer.

SECTION 10 - STABILITY AND REACTIVITY
10.1 Reactivity
Material can be made to burn; combustion is generally not self-sustaining. Reacts with oxidizers.

10.2 Chemical Stability
Stable under recommended 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
Nalkylene:
Oxidizing agents.

Linear alkyl phenyl ethoxylates:
Oxidizing agents.

1-methoxy-2-(2-methoxyethoxy)ethane:
No information found.

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)
46,000

Dermal Rabbit LD50 (mg/kg)
ND

Component Cancer List Status

	NTP Carcinogen		
	Known	Anticipated	IARC Category
Nalkylene	No	No	None
Linear alkyl phenyl ethoxylates	No	No	None
1-methoxy-2-(2-methoxyethoxy)ethane	No	No	None

Potential Health Effects

Inhalation

Nalkylene

Breathing of the mists, vapors or fumes may irritate 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.

1-methoxy-2-(2-methoxyethoxy)ethane

Breathing of mists, vapors or fumes may irritate the nose, throat and lungs. Inhalation of high vapor concentrations can cause CNS depression and narcosis.

Ingestion

Nalkylene

May cause irritation of the mouth, throat, and gastrointestinal tract. Exposure may also cause central nervous system symptoms.

Linear alkyl phenyl ethoxylates

May be harmful by ingestion.

1-methoxy-2-(2-methoxyethoxy)ethane

Gastrointestinal disturbance. Irritating to mouth, throat and stomach. May cause central nervous system depression or effects. May cause headache, pain, salivation, dizziness, diarrhea and nausea.

Skin

Nalkylene

May cause skin irritation.

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.

1-methoxy-2-(2-methoxyethoxy)ethane

May cause irritation.

Eyes

Nalkylene

Exposure to vapors, fumes or mists may cause irritation. Direct contact may cause irritation.

Linear alkyl phenyl ethoxylates

Causes irritation and possible injury to the cornea.

1-methoxy-2-(2-methoxyethoxy)ethane

May cause irritation.

Carcinogenicity

Nalkylene

Not listed by NTP or IARC as a known or possible carcinogen.

Linear alkyl phenyl ethoxylates

Not listed by NTP or IARC as a known or possible carcinogen.

1-methoxy-2-(2-methoxyethoxy)ethane

No information available.

Mutagenicity

Nalkylene

No information available.

Linear alkyl phenyl ethoxylates

No information available.

1-methoxy-2-(2-methoxyethoxy)ethane

No information available.

Reproductive Toxicity

Nalkylene
No information available.

Linear alkyl phenyl ethoxylates
No information available.

1-methoxy-2-(2-methoxyethoxy)ethane
No information available.

Teratogenic Effects

Nalkylene
No information available.

Linear alkyl phenyl ethoxylates
No information available.

1-methoxy-2-(2-methoxyethoxy)ethane
No information available.

Routes of Entry

Nalkylene
Ingestion, inhalation, skin contact.

Linear alkyl phenyl ethoxylates
Ingestion, inhalation.

1-methoxy-2-(2-methoxyethoxy)ethane
No information available.

Target Organ Statement

Nalkylene
No information available.

Linear alkyl phenyl ethoxylates
No information available.

1-methoxy-2-(2-methoxyethoxy)ethane
No information available.

SECTION 12 - ECOLOGICAL INFOMATION

12.1 Toxicity

COMPONENT: Nalkylene

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	NOEC10 (14 days, zebrafish) >10ug/L	EC50 (daphnia)> 0.041 mg/l	EC50 (72 hrs) >100 ug/l	No data

	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

COMPONENT: 1-methoxy-2-(2-methoxyethoxy)ethane

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (96 hr, golden orfe) >2000mg/L	EC50 (48hrs, daphnia) 943mg/L	CE50 > 10,000mg/L	EC50 > 5000mg/L

	Birds	Arthropods	Plants	Microorganisms

Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

12.2 Persistence and Degradability

Nalkylene
Readily biodegradable (>60% elimination in 28 days)

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

1-methoxy-2-(2-methoxyethoxy)ethane
Inherently biodegradable (>67% elimination in 28 days

12.3 Bioaccumulative Potential

Nalkylene
BCF 35

Linear alkyl phenyl ethoxylates
No data

1-methoxy-2-(2-methoxyethoxy)ethane
No data

12.4 Mobility in Soil

Nalkylene
Log Koc 4.34

Linear alkyl phenyl ethoxylates
No data

1-methoxy-2-(2-methoxyethoxy)ethane
No data

12.5 Results of PBT and vPvB Assessment

Nalkylene
Not PBT or vPvB

Linear alkyl phenyl ethoxylates
Substance is PBT / vPvB

1-methoxy-2-(2-methoxyethoxy)ethane
No data

12.6 Other Adverse Effects

Nalkylene
None

Linear alkyl phenyl ethoxylates
None

1-methoxy-2-(2-methoxyethoxy)ethane
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	N.A.	N.A.	N.A.	N.A.
14.2 Shipping Name	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.
14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	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
Nalkylene	No	No	No	Yes	No
Linear alkyl phenyl ethoxylates	No	No	No	Yes	No
1-methoxy-2-(2-methoxyethoxy)ethane	Yes	No	No	Yes	No

Europe

EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

SECTION 16 - OTHER INFORMATION

Revisional Updates

5/29/2015 - Updated Sections 2.1 and 3.2
8/6/2013 - Released Version 1.0

NFPA Codes

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

Dangers

Nalkylene

None

Linear alkyl phenyl ethoxylates

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

1-methoxy-2-(2-methoxyethoxy)ethane

H226 - Flammable liquid and vapor.
H360 - May damage fertility or the unborn child.

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