

# MATERIAL SAFETY DATA SHEET



Conforms to 93/112/EC and ISO 11014-1

## 1. Chemical Product and Company Identification

**Product Name:** Ecoscint Ultra

**Product Number:** LS-270

### Chemical Names/

#### Description:

Blend of nonionic surfactants and scintillators in solvent.

### Manufacturer

National Diagnostics  
305 Patton Drive  
Atlanta, GA 30336

### Telephone Numbers

(800) 526-3867  
(404) 699-2121

### Emergency Numbers

#### Chemtrec

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

## 2. Composition/Information on Ingredients

Component	% Comp.	CAS #	EINECS #	TLV (Units)
Bis(1-methylethyl) naphthalene	60 - 80%	38640-62-9		none established
Butyl Dioxitol	5 - 10%	112-34-5		none established
Linear alkyl phenyl ethoxylates	20 - 40%	9016-45-9		none established

## 3. Hazards Identification

### Appearance and Odor

Nearly odorless, clear, blue-violet fluorescent liquid.

#### EMERGENCY OVERVIEW - IMMEDIATE HAZARD

Bis(1-methylethyl) naphthalene

May cause eye and skin irritation. May cause respiratory and digestive tract irritation. The toxicological properties of this material have not been fully investigated.

Butyl Dioxitol

Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact(irritant, permeator).

Linear alkyl phenyl ethoxylates

CAUSES EYE IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION.

#### EMERGENCY OVERVIEW - CHRONIC HAZARD WARNING:

Bis(1-methylethyl) naphthalene

No information found.

Butyl Dioxitol

May cause kidney injury. Repeated exposure may cause central nervous system damage. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), acidosis, and quick, shallow breathing.

Linear alkyl phenyl ethoxylates

NO ADVERSE EFFECTS HAVE BEEN DOCUMENTED IN HUMANS AS A RESULT OF CHRONIC EXPOSURE.

## **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, especially 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 possibly fatal 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.

## **Signs and Symptoms of Overexposure**

### **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.

### **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.

## **4. 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.

## **5. Fire Fighting Measures**

Flash Point	>93 C	Flammable Limits	N.D.
Flash Point Method	PMCC*	Autoignition temperature	N.D.

\* Flash point value determined by Pensky-Martin Closed Cup method (PMCC). Upon request, alternate Tagliabue Closed Cup data (TCC) has been provided in some instances to local regulatory agencies.

### **Extinguishing media**

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

### **Protective Equipment**

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.

### **Hazardous Combustion Products**

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

### **Unusual Fire and Explosion Hazards**

Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back.

NFPA Codes: Health 1 Flammability 1 Reactivity 0

## **6. Accidental Release Measures**

### **Steps to be taken in case material is released or spilled**

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.

### **Waste Disposal Method**

Disposal must be made in accordance with applicable federal, state, and local regulations.

### **Personal Precautions**

Wear appropriate protective equipment as specified in section 8.

## **7. Handling and Storage**

### **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.

### **Storage**

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

### **Storage Temperature**

Room Temperature

### **Disposal**

Observe all national, state, and local regulations regarding disposal.

## **8. Exposure Controls/Personal Protection**

### **Airborne Exposure Limits**

Component: Bis(1-methylethyl) naphthalene

ACGIH Threshold Limit Value (TLV): none established

OSHA Permissible Exposure Limit (PEL): none established

Component: Butyl Dioxitol

ACGIH Threshold Limit Value (TLV): none established

OSHA Permissible Exposure Limit (PEL):

Component: Linear alkyl phenyl ethoxylates

ACGIH Threshold Limit Value (TLV): none established

OSHA Permissible Exposure Limit  
(PEL):

### 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.

### Other Control Measures

N.A.

## 9. Physical Properties

**Boiling point** 290C

**Evaporation Rate** MA

**Melting point** 30C

**Solubility in water** Somewhat miscible

**Vapor pressure (mmHg)** NA

**pH** NA

**Vapor density (Air = 1)** NA  
**% Volatile by volume** 100%

**Specific gravity (H2O = 1)** 0.96

## 10. Stability and Reactivity

### Stability

Stable under ordinary conditions of use and storage.

### Conditions to Avoid

Heat, sources of ignition.

### Hazardous Decomposition Products

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

### Hazardous Polymerization

### Incompatibles

Bis(1-methylethyl) naphthalene:

Oxidizing agents.

Butyl Dioxitol:

Strong oxidizing agents.

Linear alkyl phenyl ethoxylates:

Oxidizing agents.

## 11. Toxicological Information

### Product LD50 Values

Ecoscint Ultra	Oral Rat LD50 (mg/kg):	No Data
Ecoscint Ultra	Dermal Rabbit LD50 (mg/kg):	No Data

### Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Bis(1-methylethyl) naphthalene	No	No	None
Butyl Dioxitol	No	No	None
Linear alkyl phenyl ethoxylates	No	No	None

## 12. Ecological Information

### Bis(1-methylethyl) naphthalene

No information available.

### Butyl Dioxitol

No information available.

### Linear alkyl phenyl ethoxylates

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA is is the responsibility of the user to determine, at the time of disposal, whether the product meets the criteria for hazardous waste.

## 13. Disposal Considerations

Observe all national, state, and local regulations regarding disposal.

## 14. Transport Information

### D.O.T.

Proper Shipping Name: Not regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

### I.A.T.A.

Proper Shipping Name: Not regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

### I.M.O.

Proper Shipping Name: Not regulated.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

## 15. Regulatory Information

### 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.

## 16. Other Information

**NFPA Codes: Health 1 Flammability 1 Reactivity 0**

MANUFACTURER DISCLAIMER: The information given herein is offered in good faith as accurate, but without guarantee. Conditions of the use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.