

ScintLogic LB

Version 3.0

Date revised: 26/04/2019

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: ScintLogic LB **Product Numbers:** SG-BXX-25; SG-BXX-02

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

Supplier

LabLogic Systems, Inc.
3901 Centerview Drive
Suite B
Chantilly
VA 20151
USA
E-mail: solutions@lablogic.com

1.4 Emergency Telephone Number

Tel: +1 703-429-4209

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



WARNING

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/vapours/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	<10	112-34-5	203-961-6	H319
Linear alkyl phenyl ethoxylates	20 - 30	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 diarrhoea.

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, sulphur 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 vapours.

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 Permissible Exposure Limit (PEL): None established

Component: Butyl Dioxitol

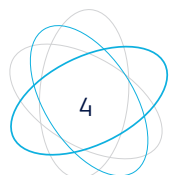
ACGIH Threshold Limit Value (TLV): None established

OSHA Permissible Exposure Limit (PEL): None established

Component: Linear alkyl phenyl ethoxylates

ACGIH Threshold Limit Value (TLV): None established

OSHA Permissible Exposure Limit (PEL): None established



8.2 Exposure Controls

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. 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	l. Vapor Density (Air = 1)	N/A
b. Odor	Odourless	m. Relative Density	0.96
c. Odor Threshold		n. Water Solubility	Somewhat miscible
d. pH	N/A	o. Partition Coefficient	
e. Melting/Freezing Point (°C)	-30	n-octanol/water	Mixture
f. Boiling point (°C)	290	p. Autoignition Temperature (°C)	N/D
g. Flash Point (°C)	> 93	q. Decomposition Temperature (°C)	N/A
h. Evaporation Rate	M/A	r. Viscosity	No data available
i. Flammability	N/A	s. Explosive Properties	N/A
j. Upper/Lower Flammability		t. Oxidizing Properties	N/A
or Explosive Limits	N/D		
k. Vapor Pressure	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

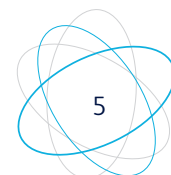
Bis(1-methylethyl) naphthalene: Oxidizing agents.

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		IARC Category
	Known	Anticipated	
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, 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.

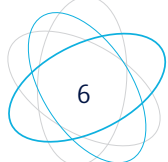
Linear alkyl phenyl ethoxylates – Causes irritation and possible injury to the cornea.

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 available.**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** – Pre-existing skin, eye, and lung disorders may be aggravated by exposure.**Linear alkyl phenyl ethoxylates** – No information available.**SECTION 12 – ECOLOGICAL INFORMATION****12.1 Toxicity****COMPONENT:** Bis(1-methylethyl) naphthalene

	Vetebrates	Invertebrates	Algae	Micro-organisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (golden orfe, 96 hr) 0.24 mg/L	Toxic: LC50 (48 hrs) EL50 (48 hrs) of 1.7 mg/L	NOEC 0.15 mg/L	No data

	Birds	Anthropods	Plants	Micro-organisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data



COMPONENT: Butyl Dioxitol

	Vetebrates	Invertebrates	Algae	Micro-organisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (96 hr, bluegill) 1300 mg/L	LC50 (48 hrs daphnia) > 100 mg/L	EC50 > 100 mg/L	EC10 (30 min) > 1995 mg/L

	Birds	Anthropods	Plants	Micro-organisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

COMPONENT: Linear alkyl phenyl ethoxylates

	Vetebrates	Invertebrates	Algae	Micro-organisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	LC50 (48 hrs daphnia) 1.821 mg/L	EC50 (48 hrs) 20 mg/L	No data

	Birds	Anthropods	Plants	Micro-organisms
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 in 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/vPvB

Butyl Dioxitol – Not PBT/vPvB

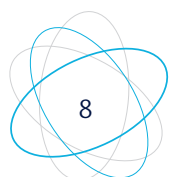
Linear alkyl phenyl ethoxylates – Substance is PBT / vPvB

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

1/21/2016 – 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

H318 – Causes serious eye damage.

Linear alkyl phenyl ethoxylates

H315 – Causes skin irritation.

H319 – Causes serious eye irritation.

H411 – Toxic to aquatic life with long lasting effects.

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 licence under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.

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INVESTORS IN PEOPLE
We invest in people Gold