

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : LIQUID TRI-DET

Other means of identification : Not applicable

Recommended use : Laundry detergent

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : Product is sold ready to use.

Company : Ecolab Inc.  
1 Ecolab Place  
St. Paul, Minnesota USA 55102  
1-800-352-5326

Emergency health information : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 12/19/2019

**SECTION 2. HAZARDS IDENTIFICATION**
**GHS Classification**

Skin irritation : Category 2

Serious eye damage : Category 1

Carcinogenicity : Category 2

Specific target organ toxicity - repeated exposure (Oral) : Category 2 (Blood)

Specific target organ toxicity - repeated exposure (Dermal) : Category 2 (Kidney)

**GHS label elements**

Hazard pictograms :




Signal Word : Danger

Hazard Statements : Causes skin irritation.  
Causes serious eye damage.  
Suspected of causing cancer.  
May cause damage to organs (Blood) through prolonged or repeated exposure if swallowed.  
May cause damage to organs (Kidney) through prolonged or repeated exposure in contact with skin.

Precautionary Statements : **Prevention:**  
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse

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cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. IF exposed or concerned: Get medical advice/ attention. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards** : None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical name	CAS-No.	Concentration (%)
alcohols, c12-16, ethoxylated	68551-12-2	10 - 30
Propylene glycol	57-55-6	5 - 10
Potassium Dodecylbenzenesulphonate	27177-77-1	5 - 10
fatty acids, tall-oil, compds. with triethanolamine	68132-46-7	5 - 10
Soap	61790-64-5	5 - 10
triethanolamine	102-71-6	1 - 5
Diethanolamine	111-42-2	1 - 5
sodium metabisulphite	7681-57-4	1 - 5

### SECTION 4. FIRST AID MEASURES

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Get medical attention if irritation develops and persists.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

### SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

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- Specific hazards during fire fighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Sulfur oxides
- Special protective equipment for fire-fighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
- Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.
- Storage temperature : 0 °C to 40 °C

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Propylene glycol	57-55-6	TWA	10 mg/m <sup>3</sup>	AIHA WEEL
triethanolamine	102-71-6	TWA	5 mg/m <sup>3</sup>	ACGIH
Diethanolamine	111-42-2	TWA (Inhalable fraction and vapor)	1 mg/m <sup>3</sup>	ACGIH
		TWA	3 ppm	NIOSH REL

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			15 mg/m3	
sodium metabisulphite	7681-57-4	TWA	5 mg/m3	NIOSH REL
		TWA	5 mg/m3	ACGIH

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

#### Personal protective equipment

Eye protection : Wear eye protection/ face protection.

Hand protection : Wear the following personal protective equipment:  
Standard glove type.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : No personal respiratory protective equipment normally required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: clear, light yellow
Odor	: Perfumes, fragrances
pH	: 7.0 - 8.5, (100 %)
Flash point	: Not applicable, Does not sustain combustion.
Odor Threshold	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: > 100 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 1.059 - 1.079
Water solubility	: partly soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available

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Thermal decomposition	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Molecular weight	: No data available
VOC	: No data available

### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Acids
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides

### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	: Inhalation, Eye contact, Skin contact
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#### Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Causes skin irritation.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Suspected of causing cancer.

#### Experience with human exposure

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Irritation
Ingestion	: No symptoms known or expected.
Inhalation	: No symptoms known or expected.

#### Toxicity

#### Product

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Acute oral toxicity	: Acute toxicity estimate : 4,289 mg/kg
Acute inhalation toxicity	: 4 h Acute toxicity estimate : > 200 mg/l Test atmosphere: dust/mist
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg
Skin corrosion/irritation	: No data available
Serious eye damage/eye irritation	: No data available
Respiratory or skin sensitization	: No data available
Carcinogenicity	
IARC	<b>Group 2B: Possibly carcinogenic to humans</b> Diethanolamine 111-42-2
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive effects	: No data available
Germ cell mutagenicity	: No data available
Teratogenicity	: No data available
STOT-single exposure	: No data available
STOT-repeated exposure	: No data available
Aspiration toxicity	: No data available

### SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Environmental Effects : Harmful to aquatic life.

#### Product

Toxicity to fish : No data available

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

#### Components

Toxicity to fish : alcohols, c12-16, ethoxylated  
LC50: 1.5 mg/l

Propylene glycol  
96 h LC50: > 10,000 mg/l

Potassium Dodecylbenzenesulphonate  
96 h LC50 Fish: 3.2 mg/l

fatty acids, tall-oil, compds. with triethanolamine  
96 h LC50 Pimephales promelas: 11,800 mg/l

triethanolamine

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96 h LC50: 11,800 mg/l

sodium metabisulphite  
96 h LC50 Fish: 150 mg/l

#### Components

Toxicity to daphnia and other aquatic invertebrates : Propylene glycol  
48 h EC50: 18,340 mg/l

fatty acids, tall-oil, compds. with triethanolamine  
48 h EC50 Ceriodaphnia dubia (water flea): 609.98 mg/l

triethanolamine  
48 h EC50: 609.88 mg/l

Diethanolamine  
48 h EC50 Daphnia: 65.5 mg/l

#### Components

Toxicity to algae : Propylene glycol  
96 h EC50: 19,000 mg/l

fatty acids, tall-oil, compds. with triethanolamine  
72 h EC50 Desmodesmus subspicatus (green algae): 216 mg/l

triethanolamine  
72 h EC50: > 100 mg/l

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Do not contaminate ponds, waterways or ditches with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

### SECTION 14. TRANSPORT INFORMATION

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The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

#### Land transport (DOT)

Not dangerous goods

#### Sea transport (IMDG/IMO)

Not dangerous goods

### SECTION 15. REGULATORY INFORMATION

#### EPCRA - Emergency Planning and Community Right-to-Know

##### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Diethanolamine	111-42-2	100	7407

##### SARA 304 Extremely Hazardous Substances Reportable Quantity


This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Serious eye damage or eye irritation  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)  
Skin corrosion or irritation

**SARA 302** : This material does not contain any components with a section 302 EHS TPQ.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:  
Diethanolamine 111-42-2 1 - 5 %

#### California Prop. 65

 **WARNING:** This product can expose you to chemicals including Diethanolamine, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### California Cleaning Product Right to Know Act of 2017 (SB 258)

This regulation applies to this product.

Chemical Name	CAS-No.	Function	List(s)
water	7732-18-5	Diluent	Not Applicable
alcohols, c12-16, ethoxylated	68551-12-2	Cleaning Agent	Not Applicable
Propylene glycol	57-55-6	Solvent	12
Potassium Dodecylbenzenesulphonate	27177-77-1	Cleaning Agent	Not Applicable
fatty acids, tall-oil, compds. with triethanolamine	68132-46-7	Cleaning Agent	Not Applicable
Soap	61790-64-5	Cleaning Agent	Not Applicable
Organic salt	Withheld	Buffer	Not Applicable
Inorganic salt	Withheld	Cleaning Agent	Not Applicable
Organic salt	Withheld	Cleaning Agent	Not Applicable
triethanolamine	102-71-6	Buffer	Not Applicable



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Diethanolamine	111-42-2	Cleaning Agent	1, 9, 18, 20
sodium metabisulphite	7681-57-4	Buffer	Not Applicable
Fragrance Ingredient(s)	Not Available	Fragrance	Not Applicable
Stilbenzene derivatives	Withheld	Cleaning Agent	Not Applicable
Citronellol	106-22-9	Fragrance	FRA
Alpha-Isomethyl Ionone	127-51-5	Fragrance	FRA
subtilisin	9014-01-1	Cleaning Agent	8
Benzyl salicylate	118-58-1	Fragrance	FRA
2-(4-tert-Butylbenzyl) propionald-hyd	80-54-6	Fragrance	FRA

\*refer to [ecolab.com/sds](http://ecolab.com/sds) for electronic links to designated lists

**The ingredients of this product are reported in the following inventories:**

**United States TSCA Inventory :**

All substances listed as active on the TSCA inventory

**Canadian Domestic Substances List (DSL) :**

This product contains one or several components listed in the Canadian NDSL.

**Australia Inventory of Chemical Substances (AICS) :**

not determined

**New Zealand. Inventory of Chemical Substances :**

not determined

**Japan. ENCS - Existing and New Chemical Substances Inventory :**

not determined

**Korea. Korean Existing Chemicals Inventory (KECI) :**

not determined

**Philippines Inventory of Chemicals and Chemical Substances (PICCS) :**

not determined

**China. Inventory of Existing Chemical Substances in China (IECSC) :**

not determined

**Taiwan Chemical Substance Inventory (TCSI) :**

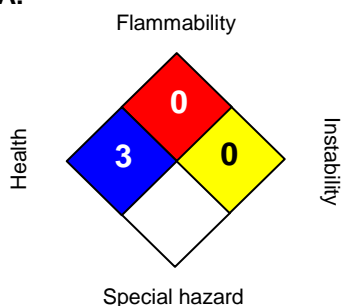
not determined

### SECTION 16. OTHER INFORMATION

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### NFPA:



### HMIS III:

HEALTH	3*
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

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Version : 2.0  
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.