



## SAFETY DATA SHEET

ASTRI-IO-250

**Section: 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : ASTRI-IO-250

Other means of identification : Not applicable.

Recommended use : Teat dip

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : Product is sold ready to use.

Company : Ecolab Co.  
5105 Tomken Road  
Mississauga, Ontario Canada L4W 2X5  
1-800-352-5326

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

Issuing date : 11/29/2018

**Section: 2. HAZARDS IDENTIFICATION****GHS Classification**

Serious eye damage : Category 1

**GHS Label element**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes serious eye damage.

Precautionary Statements : **Prevention:**  
Wear eye protection/face protection.  
**Response:**  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/ physician.

Other hazards : None known.

**Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
nonylphenoxydiglycol	68412-54-4	1 - 5
glycerin	56-81-5	1 - 5
Propylene glycol	57-55-6	1 - 5
Nonylphenoxyethanol-iodine complex	11096-42-7	1 - 5

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### 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 : Rinse with water.  
Rinse with plenty of water.
- 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. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
Sulphur oxides  
nitrogen oxides (NO<sub>x</sub>)
- Special protective equipment for firefighters : 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.
- Risk of explosion. : Not available.

### 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.



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- 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. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling.
- Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.
- Storage temperature : -10 °C to 50 °C

### Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
glycerin	56-81-5	TWA (Mist)	10 mg/m <sup>3</sup>	CAD AB OEL
		TWA (Mist)	10 mg/m <sup>3</sup>	CAD BC OEL
		VME (Mist)	10 mg/m <sup>3</sup>	OEL (QUE)
glycerin	56-81-5	TWA	10 mg/m <sup>3</sup>	ACGIH
		TWA (respirable fraction)	5 mg/m <sup>3</sup>	OSHA Z1
Propylene glycol	57-55-6	TWA (Aerosol.)	10 mg/m <sup>3</sup>	CA ON OEL
		TWA (Vapour and aerosols)	50 ppm 155 mg/m <sup>3</sup>	CA ON OEL
Propylene glycol	57-55-6	TWA	10 mg/m <sup>3</sup>	AIHA WEEL

- Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Personal protective equipment

- Eye protection : Wear eye protection/face protection.
- Hand protection : No special protective equipment required.
- Skin protection : No special protective equipment required.
- 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

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Appearance	: liquid
Colour	: dark brown
Odour	: iodine
pH	: 3.75, (100 %)
Flash point	: Not applicable., Does not sustain combustion.
Odour 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)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Relative density	: 1.016
Water solubility	: soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
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

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	: Bases
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon oxides nitrogen oxides (NOx) Sulphur oxides

### Section: 11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

## Potential Health Effects

Eyes : Causes serious eye damage.  
Skin : Health injuries are not known or expected under normal use.  
Ingestion : Health injuries are not known or expected under normal use.  
Inhalation : Health injuries are not known or expected under normal use.  
Chronic Exposure : Health injuries are not known or expected under normal use.

## Experience with human exposure

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

## Toxicity

### Product

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Acute inhalation toxicity : no data available  
Acute dermal toxicity : no data available  
Skin corrosion/irritation : no data available  
Serious eye damage/eye irritation : no data available  
Respiratory or skin sensitization : no data available  
Carcinogenicity : no data available  
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

## Components

Acute inhalation toxicity : Propylene glycol  
4 h LC50 rat: > 158.5 mg/l  
Test atmosphere: dust/mist

## Components

Acute dermal toxicity : glycerin  
LD50 rabbit: 23,000 mg/kg



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Nonylphenoxypolyethanol-iodine complex  
LD50 rabbit: > 2,000 mg/kg

### Section: 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

#### 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 : nonylphenoxydiglycol  
96 h LC50 Fish: 0.323 mg/l

glycerin  
96 h LC50 Fish: 855 mg/l

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

#### Components

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

#### Components

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

#### Persistence and degradability

Poorly biodegradable

#### Bioaccumulative potential

no data available

#### Mobility in soil

no data available

#### Other adverse effects

no data available

### Section: 13. DISPOSAL CONSIDERATIONS

Disposal methods : 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

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federal regulations.

## Section: 14. TRANSPORT INFORMATION

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 (TDG)

Not dangerous goods

### Sea transport (IMDG/IMO)

Not dangerous goods

## Section: 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

**Drug Identification Number (DIN)** : 02481707

**NPRI Components** : nonylphenoxydiglycol

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

### United States TSCA Inventory :

On the inventory, or in compliance with the inventory

### Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL.

### Australia. Industrial Chemical (Notification and Assessment) Act :

On the inventory, or in compliance with the inventory

### New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand :

On the inventory, or in compliance with the inventory

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

not determined

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

On the inventory, or in compliance with the inventory

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

On the inventory, or in compliance with the inventory

### China Inventory of Existing Chemical Substances :

On the inventory, or in compliance with the inventory

### Taiwan Chemical Substance Inventory :

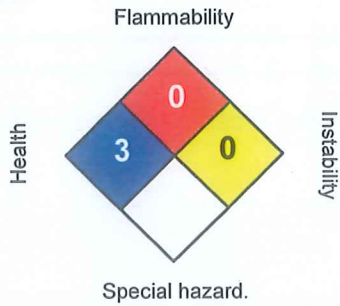
On the inventory, or in compliance with the inventory

## Section: 16. OTHER INFORMATION

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## NFPA:



## HMIS III:

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

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

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Prepared by : Regulatory Affairs 1-800-352-5326

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.