



## SAFETY DATA SHEET

### IO MIX PLUS

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : IO MIX PLUS

Other means of identification : Not applicable

Recommended use : Teat dip

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.0 % - 25.0 %

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 : 10/13/2016

#### SECTION 2. HAZARDS IDENTIFICATION

##### GHS Classification

##### Product AS SOLD

Not a hazardous substance or mixture.

##### Product AT USE DILUTION

Not a hazardous substance or mixture.

##### GHS label elements

##### Product AS SOLD

Precautionary Statements : **Prevention:**  
Wash hands thoroughly after handling.  
**Response:**  
Get medical advice/ attention if you feel unwell.  
**Storage:**  
Store in accordance with local regulations.

##### Product AT USE DILUTION

Precautionary Statements : **Prevention:**  
Wash hands thoroughly after handling.  
**Response:**  
Get medical advice/ attention if you feel unwell.  
**Storage:**  
Store in accordance with local regulations.

##### Product AS SOLD

Other hazards : None known.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

##### Product AS SOLD

Pure substance/mixture : Mixture

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Chemical name	CAS-No.	Concentration (%)
glycerin	56-81-5	10 - 30
Propylene glycol	57-55-6	5 - 10
sodium iodide	7681-82-5	1 - 5

Product AT USE DILUTION		
Chemical name	CAS-No.	Concentration (%)
glycerin	56-81-5	5 - 10
Propylene glycol	57-55-6	1 - 5

### SECTION 4. FIRST AID MEASURES

#### Product AS SOLD

In case of eye contact	: Rinse with plenty of water.
In case of skin contact	: Rinse with plenty of water.
If swallowed	: Rinse mouth. Get medical attention if symptoms occur.
If inhaled	: Get medical attention if symptoms occur.
Protection of first-aiders	: No special precautions are necessary for first aid responders.
Notes to physician	: No specific measures identified.
Most important symptoms and effects, both acute and delayed	: See Section 11 for more detailed information on health effects and symptoms.

#### Product AT USE DILUTION

In case of eye contact	: Rinse with plenty of water.
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	: Get medical attention if symptoms occur.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Product AS SOLD

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: None known.
Specific hazards during fire fighting	: Not flammable or combustible.
Hazardous combustion products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

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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.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Product AS SOLD

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : No special environmental precautions required.

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.

#### Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : No special environmental precautions required.

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

#### Product AS SOLD

Advice on safe handling : Wash hands after handling. For personal protection see section 8.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : -30 °C to 50 °C

#### Product AT USE DILUTION

Advice on safe handling : Wash hands after handling. For personal protection see section 8.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Product AS SOLD

##### Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
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glycerin	56-81-5	TWA	10 mg/m3	ACGIH
		TWA (respirable fraction)	5 mg/m3	OSHA Z1
Propylene glycol	57-55-6	TWA	10 mg/m3	AIHA WEEL
sodium iodide	7681-82-5	TWA (Inhalable fraction and vapor)	0.01 mg/m3 (Iodine)	ACGIH

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

#### Personal protective equipment

Eye protection : No special protective equipment required.

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 : Wash hands before breaks and immediately after handling the product.

#### Product AT USE DILUTION

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

#### Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

Respiratory protection : No personal respiratory protective equipment normally required.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: dark brown	dark brown
Odor	: iodine	iodine
pH	: 3.7 - 4.7, 100 %	4.1 - 4.3
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)	: No data available	

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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	: 1.14
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, kinematic	: 131.816 mm <sup>2</sup> /s (40 °C)
Explosive properties	: No data available
Oxidizing properties	: No data available
Molecular weight	: No data available
VOC	: No data available

### SECTION 10. STABILITY AND REACTIVITY

#### Product AS SOLD

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 Bases
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NO <sub>x</sub> ) Sulfur oxides Oxides of phosphorus

### SECTION 11. TOXICOLOGICAL INFORMATION

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

#### Potential Health Effects

#### Product AS SOLD

Eyes	: Health injuries are not known or expected under normal use.
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.

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Chronic Exposure : Health injuries are not known or expected under normal use.

#### Product AT USE DILUTION

Eyes : Health injuries are not known or expected under normal use.

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

##### Product AS SOLD

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

#### Product AT USE DILUTION

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

#### Toxicity

##### Product AS SOLD

###### 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

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Aspiration toxicity : No data available

#### Ingredients

Acute inhalation toxicity : Propylene glycol  
4 h LC50 Rat: > 158.5 mg/l

#### Ingredients

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

### SECTION 12. ECOLOGICAL INFORMATION

#### Product AS SOLD

##### 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

#### Ingredients

Toxicity to fish : glycerin  
96 h LC50 Fish: 855 mg/l

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

#### Ingredients

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

sodium iodide  
48 h LC50: 0.17 mg/l

#### Ingredients

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

#### Persistence and degradability

##### Product AS SOLD

No data available

##### Product AT USE DILUTION

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

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#### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Product AS SOLD

- 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.

#### Product AT USE DILUTION

- 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

#### Product AS SOLD

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

#### Product AS SOLD

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

#### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

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

**SARA 311/312 Hazards** : No SARA Hazards



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**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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

#### United States TSCA Inventory :

On 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 :

On the inventory, or in compliance with the inventory

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

not determined

#### Japan. ISHL - Inventory of Chemical Substances (METI) :

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) :

not determined

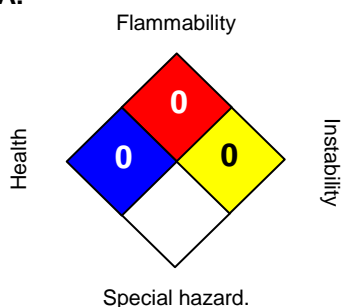
#### China. Inventory of Existing Chemical Substances in China (IECSC) :

not determined

### SECTION 16. OTHER INFORMATION

#### Product AS SOLD

##### NFPA:



##### HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

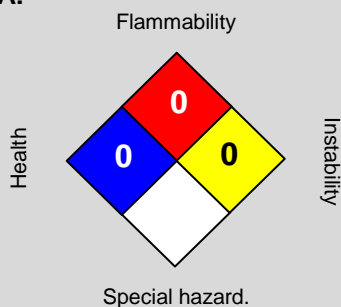
0 = not significant, 1 =Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

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### Product AT USE DILUTION

#### NFPA:



#### HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

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

Issuing date : 10/13/2016  
Version : 1.2  
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 Material 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.