



## SAFETY DATA SHEET

### KEYSTONE APEX HEAVY DUTY RINSE ADDITIVE

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

Product name : KEYSTONE APEX HEAVY DUTY RINSE ADDITIVE

Other means of identification : Not applicable.

Recommended use : Rinse Additive

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.0018 % - 0.0088 %

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 : 08/03/2015

#### 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 element

##### 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: (%)
oxirane, methyl-, polymer with oxirane	9003-11-6	30 - 60
Polyethylene Glycol	25322-68-3	30 - 60
Sodium Xylenesulfonate	1300-72-7	10 - 30
Phosphonates	3794-83-0	1 - 5
glutaraldehyde	111-30-8	0.1 - 1

#### Product AT USE DILUTION

No hazardous ingredients

#### 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 plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.

#### Section: 5. FIREFIGHTING 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 firefighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
nitrogen oxides (NOx)  
Sulphur oxides  
Oxides of phosphorus
- Special protective equipment : Use personal protective equipment.

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for firefighters

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Risk of explosion. : Not available.

### 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 : Sweep up and shovel into suitable containers for disposal.

#### 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). 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 : 0 °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

##### Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Polyethylene Glycol	25322-68-3	TWA (Aerosol.)	10 mg/m <sup>3</sup>	AIHA WEEL

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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	: solid	liquid
Colour	: dark green	colourless
Odour	: odourless	odourless
pH	: 7.0, 1 %	8.5
Flash point	: Not applicable.	
Odour Threshold	: no data available	
Melting point/freezing point	: no data available	
Initial boiling point and boiling range	: no data available	
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	: no data available	
Water solubility	: no data available	

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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

#### 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	: None known.
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

### Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : 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.
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.

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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

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 :  
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 : glutaraldehyde  
4 h LC50 rat: > 0.5 mg/l

#### Components

Acute dermal toxicity : Polyethylene Glycol  
LD50 rabbit: 20,000 mg/kg  
  
Phosphonates  
LD50 rabbit: > 1,650 mg/kg

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### 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

##### Components

Toxicity to fish : oxirane, methyl-, polymer with oxirane  
96 h LC50 Fish: > 100 mg/l

Polyethylene Glycol  
96 h LC50 Fish: > 1,000 mg/l

##### Components

Toxicity to daphnia and other aquatic invertebrates : Phosphonates  
48 h EC50 Daphnia: 167 mg/l

glutaraldehyde  
48 h EC50 Daphnia: 0.35 mg/l

##### Components

Toxicity to algae : Sodium Xylenesulfonate  
96 h EC50: 230 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

#### Product AS SOLD

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. 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-

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use empty containers. Dispose of in accordance with local, state, and federal regulations.

#### Product AT USE DILUTION

Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : 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 (TDG)

Not dangerous goods

#### Sea transport (IMDG/IMO)

Not dangerous goods

#### Product AT USE DILUTION

Not intended for transport.

### 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.

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

#### United States TSCA Inventory :

On TSCA 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 :

On the inventory, or in compliance with the inventory

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

On the inventory, or in compliance with the inventory

#### 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



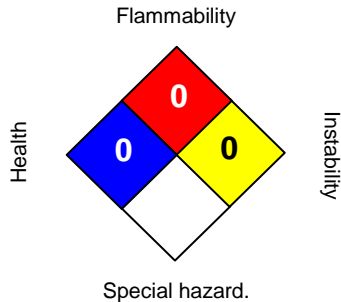
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### Section: 16. OTHER INFORMATION

#### Product AS SOLD

##### NFPA:



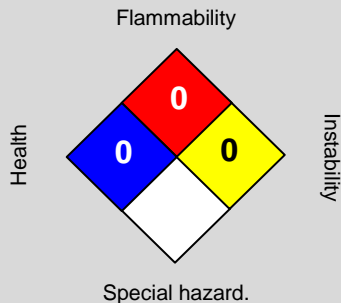
##### HMIS III:

<b>HEALTH</b>	<b>0</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

#### Product AT USE DILUTION

##### NFPA:



##### HMIS III:

<b>HEALTH</b>	<b>0</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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version : 1.0  
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.