

**KEYSTONE UNDERCOUNTER MACHINE DETERGENT**
**Section: 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : KEYSTONE UNDERCOUNTER MACHINE DETERGENT

Other means of identification : Not applicable.

Recommended use : Machine Warewashing Detergent

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)

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

Eye irritation : Category 2A

**GHS Label element**

Hazard pictograms :



Signal Word : Warning

Hazard Statements : Causes serious eye irritation.

Precautionary Statements : **Prevention:**  
Wash skin thoroughly after handling. 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. If eye irritation persists: Get medical advice/ attention.

Other hazards : Mixing this product with acid or ammonia releases chlorine gas.

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

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration: (%)
Sodium Carbonate(soda)	497-19-8	30 - 60
Sodium silicate	1344-09-8	10 - 30
Sodium dichloro-s-triazinetrione dihydrate	51580-86-0	1 - 5

**Section: 4. FIRST AID MEASURES**

## SAFETY DATA SHEET

### KEYSTONE UNDERCOUNTER MACHINE DETERGENT

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.
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	: 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 nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus
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 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	: Sweep up and shovel into suitable containers for disposal.

#### Section: 7. HANDLING AND STORAGE

## SAFETY DATA SHEET

### KEYSTONE UNDERCOUNTER MACHINE DETERGENT

- Advice on safe handling : Avoid contact with skin and eyes. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.
- Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.
- Storage temperature : 0 °C to 50 °C

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

##### Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
chlorine	7782-50-5	TWA	0.5 ppm 1.5 mg/m <sup>3</sup>	CAD AB OEL
		STEL	1 ppm 2.9 mg/m <sup>3</sup>	CAD AB OEL
		TWA	0.5 ppm	CAD BC OEL
		STEL	1 ppm	CAD BC OEL
		STEV	1 ppm 2.9 mg/m <sup>3</sup>	OEL (QUE)
		VME	0.5 ppm 1.5 mg/m <sup>3</sup>	OEL (QUE)
chlorine	7782-50-5	TWA	0.5 ppm	ACGIH
		STEL	1 ppm	ACGIH
		Ceiling	0.5 ppm 1.45 mg/m <sup>3</sup>	NIOSH REL
		C	1 ppm 3 mg/m <sup>3</sup>	OSHA Z1

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

##### Personal protective equipment

- Eye protection : Safety glasses with side-shields
- 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.

#### Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : powder
- Colour : opaque, white
- Odour : slight
- pH : 10.2 - 11.2, 1 %

## SAFETY DATA SHEET

### KEYSTONE UNDERCOUNTER MACHINE DETERGENT

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	: 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	: 0.9 - 1.0
Water solubility	: slightly 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	: Mixing this product with acid or ammonia releases chlorine gas.
Conditions to avoid	: None known.
Incompatible materials	: Acids Metals
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 : Inhalation, Eye contact, Skin contact

#### Potential Health Effects

## SAFETY DATA SHEET

### KEYSTONE UNDERCOUNTER MACHINE DETERGENT

Eyes : Causes serious eye irritation.  
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, Irritation  
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 : 4,232 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 dermal toxicity : Sodium dichloro-s-triazinetrione dihydrate  
LD50 rat: > 5,000 mg/kg

### Section: 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Environmental Effects : Harmful to aquatic life.

#### Product

Toxicity to fish : no data available

## SAFETY DATA SHEET

### KEYSTONE UNDERCOUNTER MACHINE DETERGENT

Toxicity to daphnia and other aquatic invertebrates : no data available

Toxicity to algae : no data available

#### Components

Toxicity to fish : Sodium Carbonate(soda)  
96 h LC50 Lepomis macrochirus (Bluegill sunfish): 300 mg/l

Sodium silicate  
96 h LC50: 210 mg/l

#### Components

Toxicity to daphnia and other aquatic invertebrates : Sodium Carbonate(soda)  
48 h EC50 Ceriodaphnia (water flea): 213.5 mg/l

Sodium dichloro-s-triazinetrione dihydrate  
48 h EC50 Daphnia: 0.196 mg/l

#### Persistence and degradability

Biodegradable

#### 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

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

# SAFETY DATA SHEET

## KEYSTONE UNDERCOUNTER MACHINE DETERGENT

### 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.

**NPRI Components** : maleic anhydride  
acrylic acid

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

**United States TSCA Inventory :**  
Listed on TSCA

**Canadian Domestic Substances List (DSL) :**  
All components of this product are on the Canadian DSL.

**Australia. Industrial Chemical (Notification and Assessment) Act :**  
not determined

**New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand :**  
not determined

**Japan. ENCS - Existing and New Chemical Substances Inventory :**  
not determined

**Japan. ISHL - Inventory of Chemical Substances (METI) :**  
not determined

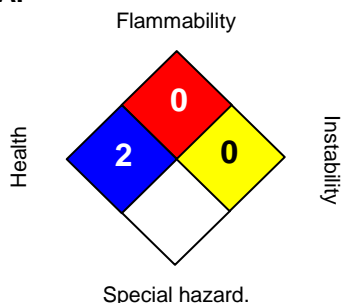
**Korea. Korean Existing Chemicals Inventory (KECI) :**  
not determined

**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

### Section: 16. OTHER INFORMATION

#### NFPA:



#### HMIS III:

<b>HEALTH</b>	<b>2</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 : 1.1  
Prepared by : Regulatory Affairs 1-800-352-5326

## **SAFETY DATA SHEET**

### **KEYSTONE UNDERCOUNTER MACHINE DETERGENT**

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.