

**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 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 : 11/09/2022

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

Eye irritation : Category 2A

**GHS label elements**

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	497-19-8	30 - 60
Sodium silicate	1344-09-8	10 - 30
Sodium dichloro-s-triazinetriene dihydrate	51580-86-0	1 - 5

**SECTION 4. FIRST AID MEASURES**

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In case of eye contact	: 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.
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. FIRE-FIGHTING 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 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 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

Advice on safe handling	: Avoid contact with skin and eyes. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine
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## SAFETY DATA SHEET

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gas. 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 50 °C

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Ingredients with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
chlorine	7782-50-5	TWA	0.1 ppm	ACGIH
		STEL	0.4 ppm	ACGIH
		C	0.5 ppm 1.45 mg/m3	NIOSH REL
		C	1 ppm 3 mg/m3	OSHA Z-1
		TWA	0.5 ppm 1.5 mg/m3	OSHA P0
		STEL	1 ppm 3 mg/m3	OSHA P0
		PEL	0.5 ppm 1.5 mg/m3	
		STEL	1 ppm 3 mg/m3	

Contains no substances with occupational exposure limit values.

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

Color : opaque, white

Odor : slight

pH : 10.2 - 11.2, (1 %)

Flash point : Not applicable, Does not sustain combustion.

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Odor 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
Vapor pressure	: No data available
Relative vapor 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
Autoignition 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

Reactivity	: No dangerous reaction known under conditions of normal use.
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	: 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

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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 : 4,651 mg/kg
Acute inhalation toxicity	: No data available
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	: 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

### SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Environmental Effects	: Harmful to aquatic life with long lasting effects.
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##### Product

Toxicity to fish	: No data available
Toxicity to daphnia and other aquatic invertebrates	: No data available
Toxicity to algae	: No data available

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#### Components

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

Sodium silicate  
96 h LC50 *Oncorhynchus mykiss* (rainbow trout): 260 mg/l

Sodium dichloro-s-triazinetriene dihydrate  
96 h LC50 *Oncorhynchus mykiss* (rainbow trout): 0.24 mg/l

#### Components

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

Sodium silicate  
48 h EC50 *Daphnia magna* (Water flea): 1,700 mg/l

Sodium dichloro-s-triazinetriene dihydrate  
48 h EC50 *Daphnia magna* (Water flea): 0.196 mg/l

#### Components

Toxicity to algae : Sodium silicate  
72 h EC50 *Desmodesmus subspicatus* (green algae): 207 mg/l

Sodium dichloro-s-triazinetriene dihydrate  
72 h EC50 *Skeletonema costatum* (marine diatom): > 100 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 : 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.

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#### 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

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** : Serious eye damage or eye irritation

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

**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.

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

This regulation applies to this product.

Chemical Name	CAS-No.	Function	List(s)
Sodium Carbonate	497-19-8	Cleaning Agent	Not Applicable
sodium sulfate	7757-82-6	Cleaning Agent	20
Sodium silicate	1344-09-8	Cleaning Agent	Not Applicable
Polyacrylates	68479-09-4	Cleaning Agent	Not Applicable
water	7732-18-5	Diluent	Not Applicable
Sodium dichloro-s-triazinetriene dihydrate	51580-86-0	Cleaning Agent	Not Applicable

\*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

##### Australia. Australian Industrial Chemicals Introduction Scheme (AICIS) :

not determined

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

not determined

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**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) :**  
On the inventory, or in compliance with the inventory

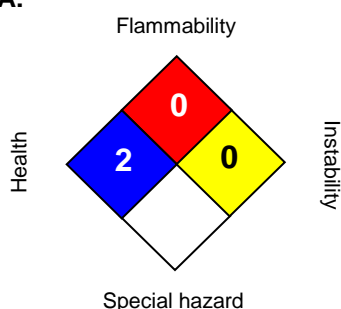
**China. Inventory of Existing Chemical Substances in China (IECSC) :**  
On the inventory, or in compliance with the inventory

**Taiwan Chemical Substance Inventory (TCSI) :**  
not determined

**Canadian Domestic Substances List (DSL) :**  
On the inventory, or in compliance with the inventory

### SECTION 16. OTHER INFORMATION

#### NFPA:



#### HMIS III:

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

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

Issuing date : 11/09/2022  
Version : 1.3  
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.