

KEYSTONE APEX CHLORINE FREE MACHINE DETERGENT

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : KEYSTONE APEX CHLORINE FREE 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 : 0.12 % - 0.24 %

Company : Ecolab Inc.

370 N. Wabasha Street

St. Paul, Minnesota USA 55102

1-800-352-5326

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

Issuing date : 02/17/2014

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD

Eye irritation : Category 2A

Product AT USE DILUTION

Not a hazardous substance or mixture.

GHS Label element

Product AS SOLD

Hazard pictograms



Signal Word : Warning

Hazard Statements : Causes serious eye irritation.

Precautionary Statements : **Prevention:**

Wash skin thoroughly after handling.

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.

Product AT USE DILUTION

Precautionary Statements : **Prevention:**

Wash hands thoroughly after handling.

Response:

Specific measures: consult MSDS Section 4.

Storage:

Store in accordance with local regulations.

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Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture : Mixture

Chemical Name CAS-No. Concentration (%)

Sodium Carbonate(soda) 497-19-8 60 - 100 oxirane, methyl-, polymer with oxirane 9003-11-6 5 - 10

Product AT USE DILUTION

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

Product AS SOLD

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.

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.

See toxicological information (Section 11)

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 : Carbon oxides

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products

for fire-fighters

Special protective equipment : 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

Product AS SOLD

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.

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 noncombustible 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 noncombustible 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 : Avoid contact with skin and eyes. Do not ingest. Do not breathe dust/

fume/ gas/ mist/ vapors/ spray. Wash hands thoroughly after handling.

Use only with adequate ventilation.

Conditions for safe storage

: Keep out of reach of children. Keep container tightly closed. Store in

suitable labeled containers.

Storage temperature : 0 °C to 50 °C

Product AT USE DILUTION

Advice on safe handling

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

Conditions for safe storage

: Keep out of reach of children. Keep container tightly closed. Store in

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suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations

below occupational exposure standards.

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 : When workers are facing concentrations above the exposure limit they

must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

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 : Extruded solid. liquid

Color : opaque, off-white colorless

Odor : slight slight

pH : 10.7 - 11.1, 1 % 10.65 - 10.91

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

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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 : 0.999 - 1.001 Relative density

Water solubility : soluble

Solubility in other solvents : no data available Partition coefficient: n-: no data available

octanol/water

Autoignition temperature : no data available Thermal decomposition : no data available Viscosity, kinematic : no data available Explosive properties : no data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

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

Hazardous decomposition

products

: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Eye contact, Skin contact

exposure

Potential Health Effects

Product AS SOLD

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.

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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 : Redness, Pain, Irritation

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 : 3,579 mg/kg

Acute inhalation toxicity : no data available
Acute dermal toxicity : no data available
Skin corrosion/irritation : no data available
Serious eye damage/eye : no data available

irritation

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

Ingredients

Acute inhalation toxicity : Sodium Carbonate(soda)

4 h LC50 rat: 1.15 mg/l

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oxirane, methyl-, polymer with oxirane 4 h LC50 rat: 0.147 mg/l

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD Ecotoxicity

Environmental Effects

: This product has no known ecotoxicological effects.

Product

: no data available Toxicity to fish Toxicity to daphnia and other

aquatic invertebrates

: no data available

Toxicity to algae

: no data available

Ingredients

Toxicity to fish

: oxirane, methyl-, polymer with oxirane

96 h LC50 Fish: > 100 mg/l

Ingredients

Toxicity to daphnia and other : Sodium Carbonate(soda)

aquatic invertebrates

48 h EC50 Daphnia: 200 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 : 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.

Product AT USE DILUTION

: Where possible recycling is preferred to disposal or incineration. If Disposal methods

> recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

: Dispose of as unused product. Empty containers should be taken to Disposal considerations

an approved waste handling site for recycling or disposal. Do not re-

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use empty containers.

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

Product AT USE DILUTION

Not intended for transport.

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 : Acute Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : 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:

1907/2006 (EU):

not determined

Switzerland. New notified substances and declared preparations :

The mixture contains substances listed on the Swiss Inventory not determined

United States TSCA Inventory:

On TSCA Inventory

Canadian Domestic Substances List (DSL):

All components of this product are on the Canadian DSL.

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Australia Inventory of Chemical Substances (AICS):

On the inventory, or in compliance with the inventory

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):

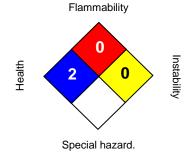
On the inventory, or in compliance with the inventory

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

not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD NFPA:

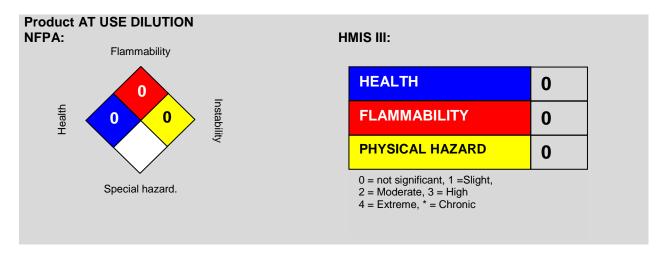


HMIS III:

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, * = Chronic



: 02/17/2014 Issuing date

: 1.0 Version

Prepared by : Regulatory Affairs

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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.

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