

Material Safety Data Sheet



KEYSTONE APEX DISHMACHINE DETERGENT

1. Product and company identification

Trade name of product : KEYSTONE APEX DISHMACHINE DETERGENT
Product use : Machine Warewashing Detergent

Product dilution information : Up to 3.3 oz/10 gal or 2.5 g/L in water

Supplier's information : Ecolab Co.
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326

Code : 913173-01

Date of issue : 28-June-2013

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

2. Hazards identification

Product AS SOLD

Physical state : Solid

Emergency overview : WARNING !

MAY CAUSE EYE IRRITATION.

Avoid contact with eyes. Wash thoroughly after handling.

Routes of entry : Skin contact, Eye contact, Ingestion

Potential acute health effects

Product AS SOLD

Eyes : Slightly irritating to the eyes.

Skin : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

See toxicological information (Section 11)

Product AT USE DILUTION

Liquid.

No specific hazard.

No specific hazard.

Product AT USE DILUTION

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

3. Composition/information on ingredients

Product AS SOLD

Name

SODIUM CARBONATE

SODIUM METASILICATE

PPG-5-LAURETH-5

troclosene sodium, dihydrate

phosphonic acid, (1-hydroxyethylidene)bis-, potassium salt

CAS number

497-19-8

6834-92-0

68439-51-0

51580-86-0

67953-76-8

% by weight

40 - 70

1 - 5

1 - 5

1 - 5

0.5 - 1.5

Product AT USE DILUTION

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

4. First-aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: Rinse with water for a few minutes.	No known effect after eye contact. Rinse with water for a few minutes.
Skin contact	: No known effect after skin contact. Rinse with water for a few minutes.	No known effect after skin contact. Rinse with water for a few minutes.
Inhalation	: No special measures required. Treat symptomatically.	No special measures required. Treat symptomatically.
Ingestion	: Get medical attention if symptoms occur.	Get medical attention if symptoms occur.

5. Fire-fighting measures

Product AS SOLD

Auto-ignition temperature	: Not available.
Flammable limits	: Not available.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides halogenated compounds metal oxide/oxides
Special remarks on fire hazards	: Not available.
Special remarks on explosion hazards	: Not available.
Fire-fighting media and instructions	: Use an extinguishing agent suitable for the surrounding fire. Dyke area of fire to prevent runoff. No specific fire or explosion hazard.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
Personal precautions	: Use personal protective equipment as required.	Use personal protective equipment as required.
Environmental precautions	: Avoid contact of large amounts of spilt material and runoff with soil and surface waterways.	Avoid contact of large amounts of spilt material and runoff with soil and surface waterways.
Methods for cleaning up	: Use a water rinse for final clean-up.	Use a water rinse for final clean-up.

7. Handling and storage

	Product AS SOLD	Product AT USE DILUTION
Handling	: Avoid contact with eyes. Do not breathe dust. Keep container closed. Use only with adequate ventilation. Mixing this product with acid or ammonia releases chlorine gas. Wash thoroughly after handling.	Wash thoroughly after handling.
Storage	: Keep out of reach of children. Store in a closed container. Store between the following temperatures: 0 and 50°C	Keep out of reach of children.

8. Exposure controls/personal protection

Product AS SOLD		Product AT USE DILUTION
Engineering measures	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Personal protection		
Eyes	: No protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Hands	: No protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Skin	: No protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Respiratory	: Avoid breathing dust.	No special protection is required.

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	Notations
chlorine	US ACGIH 1/2009	0.5	1.5	-	1	2.9	-	-	-	-	[3]
	AB 4/2009	0.5	1.5	-	1	2.9	-	-	-	-	
	BC 10/2009	0.5	-	-	1	-	-	-	-	-	
	ON 8/2008	0.5	-	-	1	-	-	-	-	-	
	QC 6/2008	0.5	1.5	-	1	2.9	-	-	-	-	

9. Physical and chemical properties

Product AS SOLD		Product AT USE DILUTION
Physical state	: Solid	Liquid.
Flash point	: > 100°C	> 100°C
Colour	: White	Colourless.
Odour	: chlorine	Odourless
pH	: 11.1 to 11.8 [Conc. (% w/w): 1%]	10.79 to 10.91
Boiling/condensation point	: Not available.	
Melting/freezing point	: Not available.	
Relative density	: Not available.	
Vapour pressure	: Not available.	
Vapour density	: Not available.	
Odour threshold	: Not available.	
Evaporation rate	: Not available.	
Viscosity	: Not available.	
Dispersibility properties	: Not available.	
Solubility	: Easily soluble in the following materials: cold water and hot water.	
LogK_{ow}	: Not available.	

10. Stability and reactivity

Product AS SOLD

- Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
- Conditions of instability** : Not available.
- Reactivity** : Slightly reactive or incompatible with the following materials: acids, alkalis and moisture. Do not allow water to enter container. Wet material may generate halogenated gas that may pressurize sealed containers. Mixing this product with acid or ammonia releases chlorine gas.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerisation** : Under normal conditions of storage and use, hazardous polymerisation will not occur.

11. Toxicological information

Potential acute health effects

Product AS SOLD

- Eyes** : Slightly irritating to the eyes.
- Skin** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Product AT USE DILUTION

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Product AS SOLD

Potential chronic health effects

- Carcinogenic effects** : No known significant effects or critical hazards.
- Mutagenic effects** : No known significant effects or critical hazards.
- Teratogenic effects** : No known significant effects or critical hazards.
- Reproductive effects** : No known significant effects or critical hazards.
- Sensitization to Product** : No known significant effects or critical hazards.
- Synergistic products (toxicologically)** : Not available.

Toxicity data

Product/ingredient name	Test	Route	Result	Species
sodium carbonate	LD50	Dermal	>2000 mg/kg	Rabbit
	LD50	Oral	2800 mg/kg	Rat
	LC50	Inhalation	1.15 mg/l	Rat
alcohols, c12-14, ethoxylated propoxylated	LD50	Dermal	2290 mg/kg	Rabbit
	LD50	Oral	>2000 mg/kg	Rat
disodium metasilicate	LD50	Oral	500 mg/kg	Rat
triclosene sodium, dihydrate	LD50	Dermal	>5000 mg/kg	Rat
	LD50	Oral	1823 mg/kg	Rat

Other adverse effects

- Target organs** : Not available.

12. Ecological information

Ecotoxicity : Not reported

13. Disposal considerations

Product AS SOLD

Waste disposal : Diluted product can be flushed to sanitary sewer.
Discard empty container in trash.

Product AT USE DILUTION

Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Product AS SOLD

TDG

TDG Classification : Not regulated.

IMO/IMDG

IMO/IMDG Classification : Not regulated.

For transport in bulk, see shipping documents for specific transportation information.

Product AT USE DILUTION

Not intended for transport.

15. Regulatory information

Product AS SOLD

WHMIS : Not hazardous by WHMIS criteria.

Product AT USE DILUTION

Not hazardous by WHMIS criteria.

Canada inventory : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. Other information

Product AS SOLD

Hazardous Material Information System (U.S.A.) :

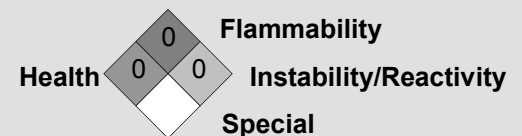
Health	1
Flammability	0
Physical hazards	0

National Fire Protection Association (U.S.A.) :



Product AT USE DILUTION

Health	0
Flammability	0
Physical hazards	0



16. Other information

Date of issue : 28-June-2013
Responsible name : Regulatory Affairs
1-800-352-5326

☑ Indicates information that has changed from previously issued version.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, **NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.**