SAFETY DATA SHEET



KEYSTONE SOLID POWER XL DISHMACHINE DETERGENT

Section 1. Chemical product and company identification

Product name Recommended use and restrictions		KEYSTONE SOLID POWER XL DISHMACHINE DETERGENT Machine Warewashing Detergent Use only for the purpose on the product label.
Product dilution information	:	Up to 2 oz/10 gal or 1.5 mL/L in water
Supplier's information	:	Ecolab Inc. Institutional Division 370 N. Wabasha Street St. Paul, MN 55102 1-800-352-5326
Code	:	913472-01
Date of issue	:	22 Feb 2013 EMERGENCY HEALTH INFORMATION: 1-800-328-0026 Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Hazards identification

	Product AS SOLD	Product AT USE DILUTION
GHS Classification	: CORROSIVE TO METALS - Category 1 SKIN CORROSION/IRRITATION - Category 1A SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 AQUATIC TOXICITY (ACUTE) - Category 3 AQUATIC TOXICITY (CHRONIC) - Category 3	Not classified.
GHS label elements		
Signal word	: Danger	No signal word.
Symbol		
Hazard statements	: May be corrosive to metals. Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.	No known significant effects or critical hazards.
Precautionary stateme	<u>nts</u>	
Prevention	: Keep only in original container. Avoid release to the environment. Wash thoroughly after handling.	Wash thoroughly after handling.
Response	: Absorb spillage to prevent material damage. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or	Get medical attention if symptoms appear.

Section 2. Hazards identification

	physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.	
Storage	: Store in corrosive resistant container with a resistant inner liner.	No other specific measures identified.
Disposal	: See section 13 for waste disposal information.	See section 13 for waste disposal information.
Other hazards	: None known.	None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture		
Product AS SOLD		
Hazardous ingredients	Concentration Range (%)	CAS number
SODIUM HYDROXIDE	65	1310-73-2
SODIUM CARBONATE oxirane, methyl-, polymer with oxirane	5 - 20 1 - 5	497-19-8 9003-11-6
2-propenoic acid, polymer with 2,5-furandione, sodium salt troclosene sodium, dihydrate	1 - 5 <1.0	52255-49-9 51580-86-0

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.

Section 4. First aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.	No known effect after eye contact. Rinse with water for a few minutes.
Skin contact	: Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.	No known effect after skin contact. Rinse with water for a few minutes.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.	No special measures required. Treat symptomatically.
Ingestion	: Get medical attention immediately. Rinse mouth. Do not induce vomiting.	Get medical attention if symptoms occur.
Protection of first- aiders	: No action shall be taken involving any personal risk dangerous to the person providing aid to give mout clothing thoroughly with water before removing it, o	h-to-mouth resuscitation. Wash contaminated
Notes to physician	: Treat symptomatically. Contact poison treatment s been ingested or inhaled.	pecialist immediately if large quantities have

See toxicological information (section 11)

Section 5. Fire-fighting measures

Product AS SOLD	
Suitable fire extinguishing media	: Use water spray, fog or foam.
Specific hazards arising from the chemical	This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus oxides metal oxide/oxides
Specific fire-fighting methods	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
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.

Section 6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
Personal precautions	 Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material. 	Use personal protective equipment as required.
Environmental precautions	: Avoid contact of spilled material and runoff with soil and surface waterways.	Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
Methods for cleaning up	: Collect spillage. Use a water rinse for final clean- up.	Use a water rinse for final clean-up.

Section 7. Handling and storage

	Product AS SOLD	Product AT USE DILUTION
Handling	: Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wash thoroughly after handling.	Wash thoroughly after handling.
Storage	: Keep out of reach of children. Keep container tightly closed.	Keep out of reach of children.
	Store between the following temperatures: -10 and 50°C	

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
SODIUM HYDROXIDE	ACGIH TLV (United States, 3/2012). C: 2 mg/m ³ OSHA PEL (United States, 6/2010). TWA: 2 mg/m ³ 8 hours. NIOSH REL (United States, 6/2009). CEIL: 2 mg/m ³

Section 8. Exposure controls/personal protection

Appropriate engineering controls	 Product AS SOLD Good general ventilation should be sufficient to control worker exposure to airborne contaminants. 	Product AT USE DILUTION Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Personal protection		
Eye protection	: Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Hand protection	: Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Skin protection	: Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Respiratory protection	: A respirator is not needed under normal and intended conditions of product use.	A respirator is not needed under normal and intended conditions of product use.
Hygiene measures	: Wash hands, forearms and face thoroughly after h smoking and using the lavatory and at the end of the should be used to remove potentially contaminated before reusing.	he working period. Appropriate techniques

Section 9. Physical and chemical properties

Product AS SOLD Physical state : Cast Solid Color : White Odor : Odorless pН : 12.5 to 12.8 (1%) Flash point : > 100°C **Explosion limits** : Not available. Flammability (solid, : Not available. gas) Melting point : Not available. **Boiling point** : Not available. Evaporation rate : Not available. (butyl acetate = 1) Vapor pressure : Not available. Vapor density : Not available. **Relative density** : Only known value: 2.12 (Water = 1) (sodium hydroxide). Solubility : Not available. Partition coefficient: : Not available. n-octanol/water Auto-ignition : Not available. temperature Decomposition : Not available. temperature

: Not available.

: Not available.

Odor threshold

Viscosity

Product AT USE DILUTION Liquid. Clear Odorless 10.11 to 10.91 > 100°C

Section 10. Stability and reactivity

Product AS SOLD	
Stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Materials to avoid	: Extremely reactive or incompatible with the following materials: acids. Highly reactive or incompatible with the following materials: metals. Reactive or incompatible with the following materials: organic materials.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Route of exposure	: Skin contact, Eye contact, Ingestion		
	Product AS SOLD	Product AT USE DILUTION	
Symptoms			
Eye contact	: Adverse symptoms may include the following: pain watering redness	No specific data.	
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur	No specific data.	
Inhalation	: Adverse symptoms may include the following: coughing Respiratory tract irritation	No specific data.	
Ingestion	: Adverse symptoms may include the following: stomach pains	No specific data.	
Acute toxicity			
Eye contact	: Causes serious eye damage.	No known significant effects or critical hazards.	
Skin contact	: Causes severe burns.	No known significant effects or critical hazards.	
Inhalation	: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.	No known significant effects or critical hazards.	
Ingestion	: May cause burns to mouth, throat and stomach.	No known significant effects or critical hazards.	
Toxicity data			

Product/ingredient name	Result	Species	Dose
sodium carbonate	LC50 Inhalation Dusts and mists	Rat	1.15 mg/l
	LD50 Dermal	Rabbit	>2000 mg/kg
	LD50 Oral	Rat	2800 mg/kg
oxirane, methyl-, polymer with oxirane	LC50 Inhalation Dusts and mists	Rat	0.147 mg/l
	LD50 Dermal	Rabbit	>2000 mg/kg
	LD50 Oral	Rat	>2000 mg/kg
2-propenoic acid, polymer with 2, 5-furandione, sodium salt	LD50 Dermal	Rabbit	>5000 mg/kg
	LD50 Oral	Rat	>5000 mg/kg
troclosene sodium, dihydrate	LD50 Dermal	Rat	>5000 mg/kg
	LD50 Oral	Rat	1823 mg/kg
Chronic toxicity			

Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Section 12. Ecological information

Product AS SOLD

Ecotoxicity

: This material is harmful to aquatic life with long lasting effects.

Aquatic and terrestrial toxicity				
Product/ingredient name	Result			
sodium hydroxide	Acute EC50 4			
sodium carbonate	Acute EC50 2			
ovirane methyl polymer with ovirane	Acute LC50 >			

40 mg/l Daphnia 48 hours 200 mg/l Daphnia 48 hours oxirane, methyl-, polymer with oxirane Acute LC50 >100 mg/l Fish 96 hours 2-propenoic acid, polymer with 2,5-furandione, Acute LC50 >100 mg/l Fish 96 hours sodium salt troclosene sodium, dihydrate Acute EC50 0.196 mg/l Daphnia 48 hours Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Product AS SOLD

Disposal methods

: Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Product AT USE DILUTION

Species

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

Exposure

Section 14. Transport information

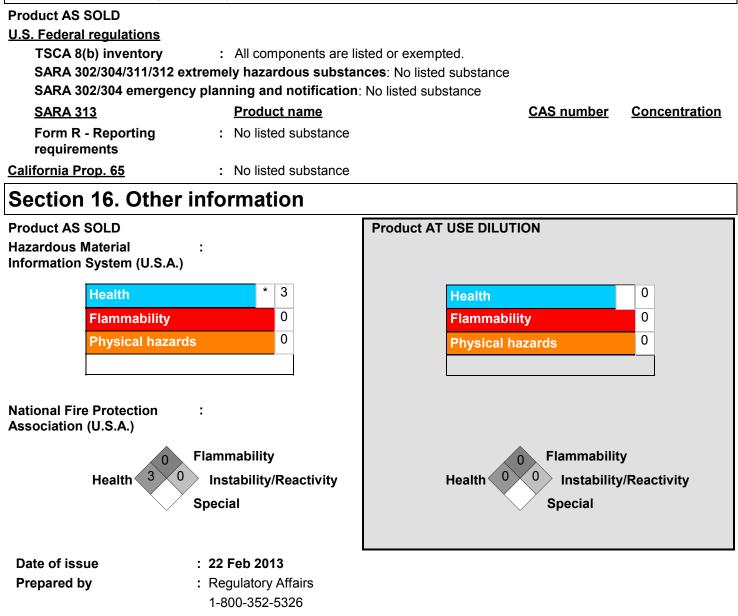
Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

DOT	
DOT Classification	UN1823
DOT Proper shipping name	Sodium hydroxide, solid mixture
Class	8
Packing group	II
IMO/IMDG	
IMO/IMDG Classification	UN1823
IMO/IMDG Proper shipping name	SODIUM HYDROXIDE, SOLID mixture
Class	8
Packing group	II

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

Product AT USE DILUTION	
Not intended for transport.	

Section 15. Regulatory information



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.