Material Safety Data Sheet

SOLID METAL PRO

1. Product and company identification

Trade name of product Product use	: SOLID METAL PRO : Machine Warewashing Detergent
Product dilution information	1 : Up to 0.38 oz/gal or 2.9 g/L in water
Supplier's information	: Ecolab Co. 5105 Tomken Road Mississauga ON L4W 2X5 1-800-352-5326
Code	: 990838
Date of issue Ou	: 21-February-2013 EMERGENCY HEALTH INFORMATION: 1-800-328-0026 tside United States and Canada CALL 1-651-222-5352 (in USA)

2. Hazards identification

	Product AS SOLD	Product AT USE DILUTION
Physical state	: Cast Solid	Liquid.
Emergency overview	: DANGER !	CAUTION !
	CAUSES DIGESTIVE TRACT, EYE AND SKIN BURNS. MAY BE HARMFUL IF SWALLOWED.	No specific hazard.
	Do not ingest. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling.	No specific hazard.
Routes of entry	: Skin contact, Eye contact, Ingestion	
Potential acute h	ealth effects	
	Product AS SOLD	Product AT USE DILUTION
Eyes	: Corrosive to eyes.	No known significant effects or critical hazards.
Skin	: Corrosive to the skin.	No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.	No known significant effects or critical hazards.
Ingestion	: Causes burns to mouth, throat and stomach. May be harmful if swallowed.	No known significant effects or critical hazards.
See toxicologic	al information (Section 11)	

3. Composition/information on ingredients

Product AS SOLD		
<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
SODIUM METASILICATE	6834-92-0	30 - 60
SODIUM CARBONATE	497-19-8	7 - 13
SUCROSE	57-50-1	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 P	Product AT USE DILUTION
Eye contact		No known effect after eye contact. Rinse with vater for a few minutes.
Skin contact		lo known effect after skin contact. Rinse vith water for a few minutes.
Inhalation		lo special measures required. Treat symptomatically.
Ingestion	: If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.	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 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	: 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 spilt material.	Use personal protective equipment as required.
Environmental precautions	: Avoid contact 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	: Collect spillage. Use a water rinse for final clean-up.	Use a water rinse for final clean-up.

sucrose

7. Handling and storage

	Product AS SOLD
Handling	: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Storage	: Keep out of reach of children. Store in a closed

 Keep out of reach of children. Store in a closed container. Keep container tightly closed.
 Store between the following temperatures: 0 and 40°C

Product AT USE DILUTION

Wash thoroughly after handling.

Keep out of reach of children.

8. Exposure controls/personal protection

					-								
Engineering measures	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.					Go to	Product AT USE DILUTION Good general ventilation should be sufficient to control worker exposure to airborne contaminants.					
Personal protect	ioi	<u>1</u>											
Eyes	 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.							
Hands	:	Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.						o protec ormal us		• •		eded under	
Skin	:	Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.						o protec ormal us				eded under	
Respiratory	: Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.						red.						
Occupational ex	po	osure limit	ts	TWA	(8 hours))	STEL (STEL (15 mins)		Ceilin	g		
Ingredient			List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations

10

-

9. P	Physical and chemical properties
------	----------------------------------

US ACGIH 3/2012

	Product AS SOLD	Product AT USE DILUTION
Physical state	: Cast Solid	Liquid.
Flash point	: Product does not support combustion.	> 100°C
Colour	: Blue. [Light]	Clear [Light]
Odour	: Odourless	Odourless
рН	: 13 [Conc. (% w/w): 1%]	10.8 to 11.6
Boiling/ condensation point	: Not available.	
Melting/freezing point	: Not available.	
Relative density	: 1.5	
Vapour pressure	: Not available.	
Vapour density	: Not available.	
Odour threshold	: Not available.	
Evaporation rate	: Not available.	
Viscosity	: Not available.	

9. Physical and chemical properties

Dispersibility properties	: Easily dispersible in the following materials: cold water and hot water.
Solubility	: Easily soluble in the following materials: cold water and hot water.
LogKow	: 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	: Extremely reactive or incompatible with the following materials: acids. Reactive or incompatible with the following materials: organic materials and moisture.
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

<u>i otoritiur uouto i</u>		
	Product AS SOLD	Product AT USE DILUTION
Eyes	: Corrosive to eyes.	No known significant effects or critical hazards.
Skin	: Corrosive to the skin.	No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.	No known significant effects or critical hazards.
Ingestion	: Causes burns to mouth, throat and stomach. May be harmful if swallowed.	No known significant effects or critical hazards.
Broduct AS SOL	п	

Product AS SOLD Potential chronic health effects

Potential chronic health eff	<u>ects</u>				
Carcinogenic effects	: No known significant effe	ects or critical hazards	S.		
Mutagenic effects	: No known significant effe	ects or critical hazards	S.		
Teratogenic effects	: No known significant effe	ects or critical hazards	S.		
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	
disodium metasilicate	LD50	Oral	500 mg/kg	Rat	
sodium carbonate	LD50	Dermal	>2000 mg/kg	Rabbit	
	LD50	Oral	2800 mg/kg	Rat	
	LC50	Inhalation	1.15 mg/l	Rat	
sucrose	LD50	Oral	29700 mg/kg	Rat	
Other adverse effects					
Target organs	: Contains material which	may cause damage t	o the following organ	s: upper respirato	ory

tract, teeth.

4/6

21 February 2013

12. Ecological information

Ecotoxicity

: Not reported

13. Disposal considerations

Product AS SOLD

Waste disposal : 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

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 <u>TDG</u>	
TDG Classification	UN3253
TDG Proper shipping name	DISODIUM TRIOXOSILICATE
Class	8
Packing group	III
IMO/IMDG	
IMO/IMDG Classification	UN3253
IMO/IMDG Proper shipping name	DISODIUM TRIOXOSILICATE mixture
Class	8
Packing group	III

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

Product AT USE DILUTION

WHMIS : Class E: Corrosive material

Not hazardous by WHMIS criteria.

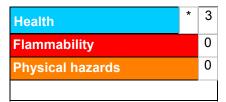
Canada inventory : All components are listed or exempted.

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.

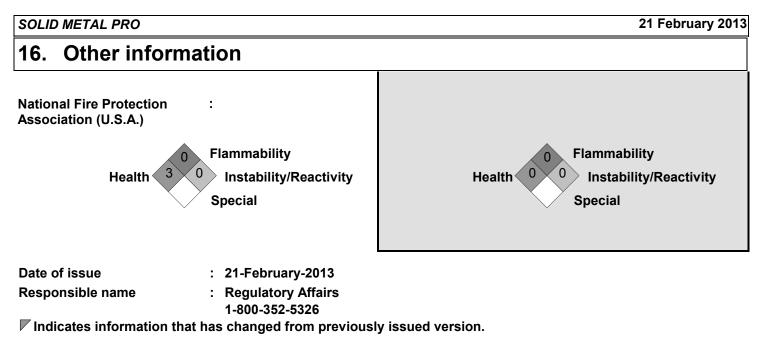
16. Other information

Product AS SOLD

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



Product AT USE DILUTION		
Health	0	
Flammability	0	
Physical hazards	0	



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.