

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	CHEM-STAR DISSOLVE GOLD
Other means of identification	:	not applicable
Product dilution information	:	0.3 % - 0.4 %
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	:	05/14/2014

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification	
Product AS SOLD Skin corrosion Serious eye damage	: Category 1A : Category 1
Product AT USE DILUTION Skin corrosion Serious eye damage	: Category 1A : Category 1
GHS Label element	
Product AS SOLD Hazard pictograms	
Signal Word	: Danger
Hazard Statements	: Causes severe skin burns and eye damage.
Precautionary Statements	 Prevention: Do not breathe dust or mist. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Mixing this product with acid or ammonia releases chlorine gas. Response: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 doctor/ physician. Wash contaminated clothing before reuse. Storage: Store locked up. Disposal:

eye damage. ding. Wear protective gloves/ on/ face protection. Do NOT induce vomiting. IF ON SKIN ediately all contaminated clothing. F INHALED: Remove victim to fresh a comfortable for breathing. IF IN ter for several minutes. Remove asy to do. Continue rinsing. NTER or doctor/ physician. Wash use.
dling. Wear protective gloves/ on/ face protection. Do NOT induce vomiting. IF ON SKIN ediately all contaminated clothing. F INHALED: Remove victim to fresh a comfortable for breathing. IF IN ter for several minutes. Remove asy to do. Continue rinsing. NTER or doctor/ physician. Wash use.
dling. Wear protective gloves/ on/ face protection. Do NOT induce vomiting. IF ON SKIN ediately all contaminated clothing. F INHALED: Remove victim to fresh a comfortable for breathing. IF IN ter for several minutes. Remove asy to do. Continue rinsing. NTER or doctor/ physician. Wash use.
on/ face protection. Do NOT induce vomiting. IF ON SKIN ediately all contaminated clothing. F INHALED: Remove victim to fresh a comfortable for breathing. IF IN ter for several minutes. Remove asy to do. Continue rinsing. NTER or doctor/ physician. Wash use.
o an approved waste disposal plant.
Concentration (%) 30 - 60 30 - 60 5 - 10 1 - 5 0.1 - 1

Product	AS	SO	LD
---------	----	----	----

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 immediately.
In case of skin contact	:	Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed	:	Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	:	Remove to fresh air. Treat symptomatically. 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	:	No specific measures identified.
Product AT USE DILUTION 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 immediately.
In case of skin contact	:	Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	:	Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	:	Remove to fresh air. Treat symptomatically. 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 products	: Carbon oxides		
Special protective equipment for fire-fighters	: Use personal protective equipment.		
Specific extinguishing methods	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. 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,	:	Ensure adequate ventilation. Keep people away from and upwind of
protective equipment and		spill/leak. Avoid inhalation, ingestion and contact with skin and eyes.
emergency procedures		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 non- combustible 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	:	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 non- combustible 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	not ingest. Do not breathe dust/ fume/ get in eyes, on skin, or on clothing. Wa Idling. Use only with adequate ventilation d or ammonia releases chlorine gas.	ash hands thoroughly after
Conditions for safe storage	not store near acids. Keep out of reach tly closed. Store in suitable labeled cor	
Storage temperature	°C to 50 °C	
Product AT USE DILUTION		
Advice on safe handling	not ingest. Do not breathe dust/ fume/ get in eyes, on skin, or on clothing. Wa adling. Use only with adequate ventilation	ash hands thoroughly after
Conditions for safe storage	ep out of reach of children. Keep contai able labeled containers.	ner tightly closed. Store in

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Ingredients with	workplace control	parameters
------------------	-------------------	------------

Ingredients	CAS-No.	Form of	Permissible	Basis
-------------	---------	---------	-------------	-------

		exposure	concentration	
sodium hydroxide	1310-73-2	Ceiling	2 mg/m3	ACGIH
		Ceiling	2 mg/m3	NIOSH REL
		TWA	2 mg/m3	OSHA Z1
chlorine	7782-50-5	TWA	0.5 ppm	ACGIH
		STEL	1 ppm	ACGIH
		Ceiling	0.5 ppm 1.45 mg/m3	NIOSH REL
		C	1 ppm 3 mg/m3	OSHA Z1
Engineering measures		aust ventilation s tional exposure	ystem. Maintain air co standards.	oncentrations
Personal protective equipme	ent			
Eye protection	: Safety goggle Face-shield	S		
Hand protection	Standard glov Gloves should	e type.	rotective equipment: nd replaced if there is «through.	any indication of
Skin protection		ective equipmen s and protective	t comprising: suitable clothing	protective gloves,
Respiratory protection		When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.		
Hygiene measures	product. Provi	ide suitable facil	nd immediately after h ities for quick drenchir contact or splash haza	ng or flushing of
Product AT USE DILUTION Engineering measures		aust ventilation s tional exposure	ystem. Maintain air co standards.	oncentrations
Personal protective equipme	ent			
Eye protection	: Safety goggle Face-shield	S		
Hand protection	Standard glov Gloves should	ve type.	rotective equipment: nd replaced if there is <through.< td=""><td>any indication of</td></through.<>	any indication of
Skin protection		ective equipmen s and protective	t comprising: suitable clothing	protective gloves,
Respiratory protection		s are facing cono ropriate certified	centrations above the respirators.	exposure limit they
SECTION 9. PHYSICAL AND	CHEMICAL PRO	PERTIES		

Product AS SOLD

Product AT USE DILUTION

Appearance	: powder	liquid
Color	: orange	light orange
Odor	: Chlorine	slight
рН	: 12.3, 1 %	11.8 - 12.8
Flash point	: not applicable, Does not susta	ain combustion.
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	: no data available	
Water solubility	: 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

Product AS SOLD 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	Metals Acids Organic materials	
Hazardous decomposition products	Carbon oxides nitrogen oxides (NOx) Sodium oxides	

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation, Eye contact, Skin contact exposure

Potential Health Effects

Product AS SOLD Eyes	Causes serious eye damage.	
Skin	Causes severe skin burns.	
Ingestion	Causes digestive tract burns.	
Inhalation	May cause nose, throat, and lung irritation.	
Chronic Exposure	Health injuries are not known or expected under normal use.	
Product AT USE DILUTION Eyes	Causes serious eye damage.	
Skin	Causes severe skin burns.	
Ingestion	Causes digestive tract burns.	
Inhalation	May cause nose, throat, and lung irritation.	
Chronic Exposure	Health injuries are not known or expected under normal use.	

Experience with human exposure

Product AS SOLD Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough
Product AT USE DILUTION	
Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough
Toxicity	
Product AS SOLD	
Acute oral toxicity	: Acute toxicity estimate : 2,959 mg/kg
•	
Acute inhalation toxicity	: no data available

Acute dermal toxicity	: no data available
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
Ingredients	
Acute inhalation toxicity	: oxirane, methyl-, polymer with oxirane 4 h LC50 rat: 0.147 mg/l
Ingredients	
Acute dermal toxicity	 troclosene sodium, dihydrate LD50 rat: > 5,000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD Ecotoxicity

Ecoloxicity		
Environmental Effects	: Toxic	to aquatic life. Toxic to aquatic life with long lasting effects.
Product		
Toxicity to fish	: no dat	a available
Toxicity to daphnia and aquatic invertebrates	other : no dat	a available
Toxicity to algae	: no dat	a available
Ingredients		
Toxicity to fish		n metasilicate C50 Fish: 210 mg/l
		e, methyl-, polymer with oxirane C50 Fish: > 100 mg/l
Ingredients		
Toxicity to daphnia and aquatic invertebrates		n Carbonate C50 Daphnia : 200 mg/l
		n hydroxide C50: 40 mg/l
		ene sodium, dihydrate C50 Daphnia : 0.196 mg/l
Densistence and down		

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 : The product should not be allowed to enter drains, water courses or the soil. 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		
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.

uco omntu containore

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)	
UN number	: 3262
Description of the goods	: Corrosive solid, basic, inorganic, n.o.s. (troclosene sodium, dihydrate, sodium hydroxide)
Class	: 8
Packing group	: 11
Environmentally hazardous	: no
Sea transport (IMDG/IMO)	
UN number	: 3262
Description of the goods	: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (troclosene sodium, dihydrate, sodium hydroxide)
Class	: 8
Packing group	: 11
Marine pollutant	: yes

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

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium hydroxide	1310-73-2	1000	2778

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.

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

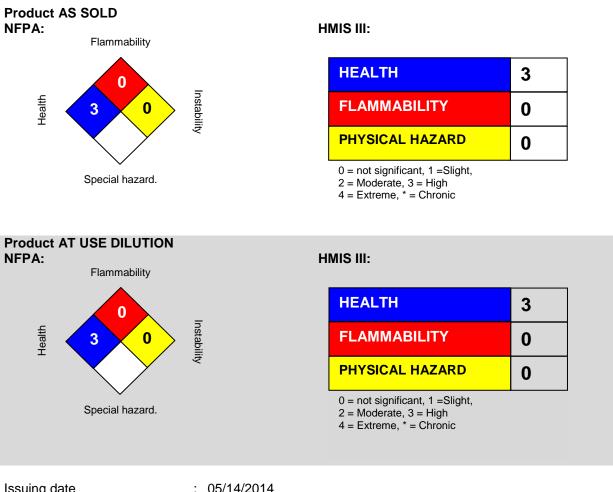
Korea. Korean Existing Chemicals Inventory (KECI) : not determined

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

SECTION 16. OTHER INFORMATION



Issuing date	-	05/14/2014
Version	:	1.0
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 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.