

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	INSTITUTIONAL FINISH
Other means of identification	:	Not applicable
Recommended use	:	Machine Warewashing Detergent
Restrictions on use	:	Reserved for industrial and professional use.
Product dilution information	:	0.4 % - 0.7 %
Company	:	Ecolab Inc. 1 Ecolab Place St. Paul, Minnesota USA 55102 1-800-352-5326
Emergency health information	:	1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)
Issuing date	:	06/17/2019
SECTION 2. HAZARDS IDEN	NTIF	TCATION
GHS Classification		
Product AS SOLD Eye irritation	:	Category 2A
Product AT USE DILUTION Not a hazardous substance of	r mi	xture.
GHS label elements		
Product AS SOLD Hazard pictograms	:	
Signal Word	:	Warning
Hazard Statements	:	Causes serious eye irritation.
Precautionary Statements	:	 Prevention: Wash skin thoroughly after handling. Wear eye protection/ face protection. 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: Get medical advice/ attention if you feel unwell. Storage:

	Store in acco	ordance with local regulati	ons.
Product AS SOLD Other hazards	: Mixing this p	product with acid or ammo	nia releases chlorine gas.
SECTION 3. COMPOSITION/	INFORMATION	ON INGREDIENTS	
Product AS SOLD Pure substance/mixture	: Mixture		
Chemical name Sodium Carbonate Sodium silicate Sodium dichloro-s-triazinetrion	ne dihydrate	CAS-No. 497-19-8 1344-09-8 51580-86-0	Concentration (%) 30 - 60 10 - 30 1 - 5
Product AT USE DILUTION			
No hazardous ingredients			
SECTION 4. FIRST AID MEAS	SURES		
Product AS SOLD In case of eye contact	contact lense		er for several minutes. Remove do. Continue rinsing. If eye attention.
In case of skin contact	: Rinse with p	lenty of water.	
If swallowed	: Rinse mouth	n. Get medical attention if	symptoms occur.
If inhaled	: Get medical	attention if symptoms occ	sur.
Protection of first-aiders	: If potential for protective ec		Section 8 for specific personal
Notes to physician	: Treat sympto	omatically.	
Most important symptoms and effects, both acute and delayed	: See Section symptoms.	11 for more detailed infor	mation on health effects and
Product AT USE DILUTION In case of eye contact	: Rinse with p	lenty of water.	
In case of skin contact	: Rinse with p	lenty of water.	
If swallowed	: Rinse mouth	n. Get medical attention if	symptoms occur.
If inhaled	: Get medical	attention if symptoms occ	sur.

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	:	None known.

media		
Specific hazards during fire fighting	:	Not flammable or combustible.
Hazardous combustion products	:	Decomposition products may include the following materials: Carbon oxides Sulfur oxides
Special protective equipment for fire-fighters	:	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 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	Sweep up and shovel into suitable containers for disposal.	
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 no 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	:	Avoid contact with skin and eyes. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.
Conditions for safe storage	:	Keep out of reach of children. Store in suitable labeled containers.
Storage temperature	:	0 °C to 50 °C
Product AT USE DILUTION Advice on safe handling	:	Wash hands after handling. For personal protection see section 8.
Conditions for safe storage	:	Keep out of reach of children. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Ingredients with workplace control parameters

Components	CAS-No.	Form of	Permissible	Basis
		exposure	concentration	
chlorine	7782-50-5	TWA	0.1 ppm	ACGIH
		STEL	0.4 ppm	ACGIH
		Ceiling	0.5 ppm 1.45 mg/m3	NIOSH REL
		С	1 ppm 3 mg/m3	OSHA Z1
Engineering measures		Good general ventilation should be sufficient to control worker exposure to airborne contaminants.		
Personal protective equipmen	t			
Eye protection	: Safety glasses	Safety glasses with side-shields		
Hand protection	: No special pro	No special protective equipment required.		
Skin protection	: No special pro	No special protective equipment required.		
Respiratory protection	: No personal re	No personal respiratory protective equipment normally required.		
Hygiene measures		Handle in accordance with good industrial hygiene and safety practice. 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	t			
Eye protection	: No special pro	otective equipme	nt required.	
Hand protection	: No special pro	otective equipme	nt required.	
Skin protection	: No special pro	No special protective equipment required.		
Respiratory protection	: No personal re	No personal respiratory protective equipment normally required.		

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION		
Appearance	: powder	liquid		
Color	: opaque, white	colorless		
Odor	: slight	odorless		
рН	: 10.2 - 11.2, (1 %)	10.0 - 11.0		
Flash point	: Not applicable, Does not sustain of	Not applicable, Does not sustain combustion.		
Odor Threshold	: No data available	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	:	0.9 - 1.0
Water solubility	:	slightly 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 Reactivity	:	No dangerous reaction known under conditions of normal use.
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	:	Acids Metals
Hazardous decomposition products	:	Decomposition products may include the following materials: Carbon oxides Sulfur 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 irritation.

nown or expected under normal use.
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nown or expected under normal use.
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Experience with human exposure

Product AS SOLD Eye contact	dness, Pain, Irritation	
Skin contact	symptoms known or expec	ed.
Ingestion	symptoms known or expec	ed.
Inhalation	symptoms known or expec	ed.
Product AT USE DILUTION Eye contact	symptoms known or expec	ted.
Skin contact	symptoms known or expec	ied.
Ingestion	symptoms known or expec	ied.
Inhalation	symptoms known or expec	ed.

Toxicity

Product AS SOLD Product		
Acute oral toxicity	:	Acute toxicity estimate : 4,823 mg/kg
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	Acute toxicity estimate : > 5,000 mg/kg
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

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD Ecotoxicity		
Environmental Effects	:	Harmful to aquatic life.
Product		
Toxicity to fish	:	No data available
Toxicity to daphnia and other aquatic invertebrates	:	No data available
Toxicity to algae	:	No data available
Components		
Toxicity to fish	:	Sodium Carbonate 96 h LC50 Lepomis macrochirus (Bluegill sunfish): 300 mg/l
		Sodium silicate 96 h LC50 Oncorhynchus mykiss (rainbow trout): 260 mg/l
Components		
Toxicity to daphnia and other aquatic invertebrates	:	Sodium Carbonate 48 h EC50 Ceriodaphnia (water flea): 213.5 mg/l
		Sodium silicate 48 h EC50 Daphnia magna (Water flea): 1,700 mg/l
		Sodium dichloro-s-triazinetrione dihydrate 48 h EC50 Daphnia: 0.196 mg/l
Components		
Toxicity to algae	:	Sodium silicate 72 h EC50 Desmodesmus subspicatus (green algae): 207 mg/l
Persistence and degradability	/	
Product AS SOLD Biodegradable		
Product AT USE DILUTION Biodegradable		
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	:	Do not contaminate ponds, waterways or ditches with chemical or used container. 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. Dispose of in accordance with local, state, and federal regulations.
Product AT USE DILUTION Disposal methods	:	Diluted product can be flushed to sanitary sewer.
Disposal considerations	:	Dispose of in accordance with local, state, and federal regulations.

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

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	erious eye damage or eye irritation	
SARA 302	his material does not contain any components with a section HS TPQ.	302
SARA 313	his material does not contain any chemical components with I AS numbers that exceed the threshold (De Minimis) reporting stablished 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.

California Cleaning Product Right to Know Act of 2017 (SB 258)

This regulation applies to this prod	luct.		
Chemical Name	CAS-No.	Function	List(s)
Sodium Carbonate	497-19-8	Cleaning Agent	Not Applicable
sodium sulfate	7757-82-6	Processing Aid	20
Sodium silicate	1344-09-8	Processing Aid	Not Applicable
water	7732-18-5	Processing Aid	Not Applicable
Anionic polymer	Withheld	Cleaning Agent	Not Applicable
Sodium dichloro-s-triazinetrione dihydrate	51580-86-0	Cleaning Agent	Not Applicable
Silica	Withheld	Processing Aid	Not Applicable
Nonionic surfactant	Withheld	Cleaning Agent	Not Applicable

*refer to ecolab.com/sds for electronic links to designated lists

The ingredients of this product are reported in the following inventories:

United States TSCA Inventory :

On the inventory, or in compliance with the inventory

Australia Inventory of Chemical Substances (AICS) :

not determined

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

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

Taiwan Chemical Substance Inventory (TCSI) :

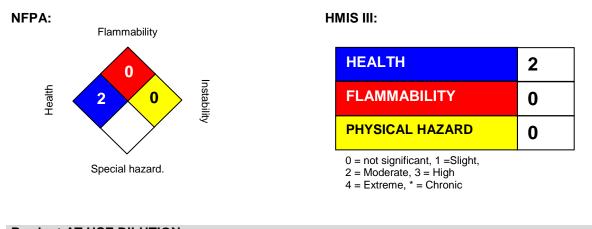
not determined

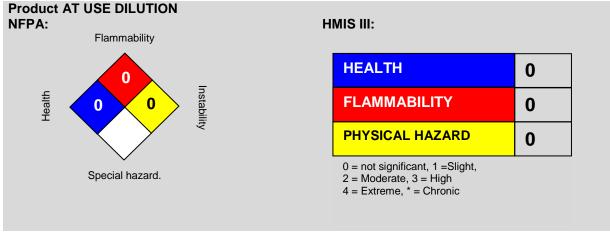
Canadian Domestic Substances List (DSL) :

On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Product AS SOLD





Issuing date	:	06/17/2019
Version	:	1.2
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 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.