

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	TRISTAR CHLORLITE
Other means of identification	:	Not applicable
Recommended use	:	Bleach
Restrictions on use Product dilution information	:	Reserved for industrial and professional use. 0.05 % - 0.14 %
Company Emergency health	:	Ecolab Inc. 1 Ecolab Place St. Paul, Minnesota USA 55102 1-800-352-5326 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)
information	•	1 000 020 0020 (00/04/1404), 1 001 222 0002 (00/3140 00)
Issuing date	:	12/18/2019

SECTION 2. HAZARDS IDENTIFICATION

GHS	Classification
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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 elements		
Product AS SOLD Hazard pictograms	:	
Signal Word	:	Danger
Hazard Statements	:	Causes severe skin burns and eye damage.
Precautionary Statements	:	Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. 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/doctor. Wash contaminated clothing before reuse. Storage: Store locked up. Disposal:

	Dispose of contents/ container to an approved waste disposal plant.
Product AT USE DILUTION Hazard pictograms	
Signal Word	Danger
Hazard Statements	Causes severe skin burns and eye damage.
Precautionary Statements	Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. 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/doctor. Wash contaminated clothing before reuse. Storage: Store locked up. Disposal: Dispose of contents/ container to an approved waste disposal plant.
Product AS SOLD Other hazards	Mixing this product with acid or ammonia releases chlorine gas.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD Chemical name sodium hypochlorite Sodium hydroxide	CAS-No. 7681-52-9 1310-73-2	Concentration (%) 10 - 30 0.1 - 1
Product AT USE DILUTION		

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

Product AS SOLD In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for a 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. U a mild soap if available. Wash clothing before reuse. Thoroughly cle 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	:	Treat symptomatically.
Most important symptoms and effects, both acute and delayed	:	See Section 11 for more detailed information on health effects and symptoms.
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.

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	:	Decomposition products may include the following materials: Carbon 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	 Ensure adequate ventilation. Keep people away from and upwind of 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). 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). 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	:	Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
Conditions for safe storage	:	Do not store near acids. Keep out of reach of children. Store in suitable labeled containers.
Storage temperature	:	-15 °C to 40 °C
Product AT USE DILUTION Advice on safe handling	:	Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
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
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		exposure	concentration			
sodium hypochlorite	7681-52-9	STEL	2 mg/m3	AIHA WEEL		
sodium hydroxide	1310-73-2	Ceiling	2 mg/m3	ACGIH		
		Ceiling	2 mg/m3	NIOSH REL		
		TWA	2 mg/m3	OSHA Z1		
Engineering measures		ust ventilation s tional exposure	ystem. Maintain air co standards.	oncentrations		
Personal protective equipme	ent					
Eye protection	: Wear eye prot	ection/ face prot	ection.			
Hand protection	Standard glov Gloves should	e type.	rotective equipment: nd replaced if there is through.	any indication of		
Skin protection		Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing				
Respiratory protection		When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.				
Hygiene measures	practice. Rem Wash face, ha Provide suitat	Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.				
Product AT USE DILUTION						
Engineering measures		ust ventilation s tional exposure	ystem. Maintain air co standards.	oncentrations		
Personal protective equipme	ent					
Eye protection	: Wear eye pro	tection/ face prot	tection.			
Hand protection	Standard glov Gloves should	Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.				
Skin protection		ective equipmen s and protective	t comprising: suitable clothing	protective gloves,		
Respiratory protection		s are facing conc ropriate certified	centrations above the respirators.	exposure limit they		
SECTION 9. PHYSICAL AND	CHEMICAL PRO	PERTIES				

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: light yellow	colorless
Odor	: Chlorine	Chlorine
рН	: 12.5, (100 %)	9.5 - 11.5

:	Not applicable
:	No data available
:	Not applicable
:	No data available
:	1.154
:	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	:	In case of fire hazardous decomposition products may be produced such as: Carbon 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 Product	
Acute oral toxicity	: No data available
Acute inhalation toxicity	: No data available
Aguta darmal taxiaity	: No doto ovoilabla

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
Components		
Acute oral toxicity	:	sodium hypochlorite LD50 Rat: 5,230 mg/kg
Components		
Acute dermal toxicity	:	sodium hypochlorite LD50 Rabbit: > 10,000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD Ecotoxicity		
Environmental Effects	:	Very toxic 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 hypochlorite 96 h EC50: 0.14 mg/l
Components		
Toxicity to daphnia and other aquatic invertebrates	:	sodium hypochlorite 48 h EC50: 0.071 mg/l
		Sodium hydroxide 48 h EC50: 40 mg/l
Persistence and degradability	у	
Product AS SOLD Not applicable - inorganic		
Product AT USE DILUTION Not applicable - inorganic		

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CON	ISIDERATIONS
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.
RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste	: D002 (Corrosive)
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. 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)

UN number	: 1791	
Description of the goods	: Hypochlorite solutions	
	(sodium hypochlorite)	
Class	: 8	
Packing group	: 111	
Environmentally hazardous	: no	
Sea transport (IMDG/IMO)		
	. 1701	
UN number		J
	: HYPOCHLORITE SOLUTION	١
UN number		٩
UN number Description of the goods	: HYPOCHLORITE SOLUTION (sodium hypochlorite)	١
UN number Description of the goods Class	 HYPOCHLORITE SOLUTION (sodium hypochlorite) 8 	١

SECTION 15. REGULATORY INFORMATION

Product AS SOLD

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium hypochlorite	7681-52-9	100	1000

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	Skin corrosion or irritation Serious eye damage or eye irritation	
SARA 302	This material does not contain any components with a section 30 EHS TPQ.	2
SARA 313	This material does not contain any chemical components with kn CAS numbers that exceed the threshold (De Minimis) reporting le 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.

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

This regulation applies to this product.

Chemical Name	CAS-No.	Function	List(s)
water	7732-18-5	Diluent	Not Applicable
sodium hypochlorite	7681-52-9	Cleaning Agent	Not Applicable
Sodium hydroxide	1310-73-2	Cleaning Agent	20
the family and the same family family structure in the standard standard the same			

*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 :

All substances listed as active on the 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 :

not determined

Japan. ENCS - Existing and New Chemical Substances Inventory : On the inventory, or in compliance with the inventory

Korea. Korean Existing Chemicals Inventory (KECI) :

On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

On the inventory, or in compliance with the inventory

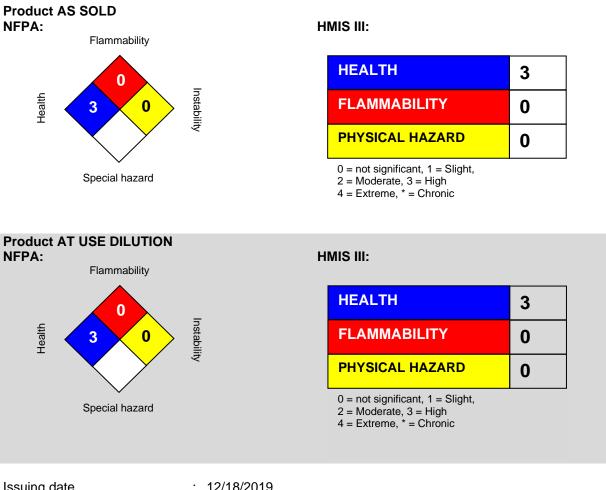
China. Inventory of Existing Chemical Substances in China (IECSC) :

On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI) :

On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION



Issuing date	-	12/18/2019
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 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.