

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name Other means of identification	:	โทแพ็คซ <i>์</i> เอฟ-คลีน TOPAX F-CLEAN Not applicable
Recommended use	:	Surface cleaner
Restrictions on use Product dilution information		Reserved for industrial and professional use. 1.0 % - 5.0 %
Company	:	Ecolab Ltd. 101/97 Navanakorn Industrial Estate, Klongnueng, Klongluang, Pathumtanee 12120 THAILAND Telephone : +66-2909-7030 Fax : +66-2909-2274 NALCO INDUSTRIAL SERVICES (THAILAND) CO LTD Rayong Plant, 109/19 M00 4, Eastern Seaboard Industrial Estate, Soi ESIE 6, T. Pluakdaeng, A. Pluakdaeng, Rayong, THAILAND 21140 TEL: +66-33-109-021
Emergency telephone	:	+1-651-222-5352 (United States)
Issuing date	:	06.03.2020

SECTION 2. HAZARDS IDENTIFICATION

GHS (Classification
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Product AS SOLD Corrosive to Metals Skin corrosion/irritation Serious eye damage/eye irritation Carcinogenicity Short-term (acute) aquatic hazard	: Category 1 : Category 2
Product AT USE DILUTION Skin corrosion/irritation Serious eye damage/eye irritation	: Category 2 : Category 2A
GHS label elements	
Product AS SOLD Hazard pictograms	
Signal Word	: Danger
Hazard Statements	: May be corrosive to metals.

SAFETY DATA SHEET

TOPAX F-CLEAN	
	Causes severe skin burns and eye damage. Suspected of causing cancer. Harmful to aquatic life.
Precautionary Statements	 Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original container. Do not breathe dusts or mists. Wash skin thoroughly after handling. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection. Use personal protective equipment as required. 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. Immediately call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Storage: Store locked up. Store in corrosive resistant container with a resistant inner liner. Disposal: Dispose of contents/ container to an approved waste disposal plant.
Product AT USE DILUTION Hazard pictograms	
Signal Word	Warning
Hazard Statements	Causes skin irritation. Causes serious eye irritation.
Precautionary Statements	 Prevention: Wash skin thoroughly after handling. Wear protective gloves/ eye protection/ face protection. Response: IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.
Product AS SOLD Other hazards	None known.
SECTION 3. COMPOSITION/IN	FORMATION ON INGREDIENTS
Product AS SOLD Pure substance/mixture	Mixture
Chemical name	CAS-No. Concentration (%)

SAFETY DATA SHEET

TOPAX F-CLEAN			
Sodium hydroxide		1310-73-2	10 - 30
Product AT USE DILUTION Chemical name Sodium hydroxide Nitrilotriaceticacid[NTA] Salt		CAS-No. 1310-73-2 5064-31-3	Concentration (%) 0.1 - 1 0.1 - 1
SECTION 4. FIRST AID MEAS	SURES		
Product AS SOLD In case of eye contact	least 15 minutes		r, also under the eyelids, for at ses, if present and easy to do. n immediately.
In case of skin contact	a mild soap if av		ater for at least 15 minutes. Use g before reuse. Thoroughly clean ntion immediately.
If swallowed			ice vomiting. Never give person. Get medical attention
If inhaled	: Remove to fresl symptoms occu		tically. Get medical attention if
Protection of first-aiders	: If potential for e protective equip		Section 8 for specific personal
Notes to physician	: Treat symptoma	atically.	
Most important symptoms and effects, both acute and delayed	: See Section 11 symptoms.	for more detailed infor	mation on health effects and
Product AT USE DILUTION In case of eye contact	least 15 minutes		r, also under the eyelids, for at ses, if present and easy to do. n immediately.
In case of skin contact	a mild soap if av		ater for at least 15 minutes. Use g before reuse. Thoroughly clean ntion immediately.
If swallowed	: Rinse mouth wi	th water.	
If inhaled	: Get medical atte	ention if symptoms occ	cur.

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	:	Exposure to decomposition products may be a hazard to health.

Hazardous combustion products	:	Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) 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 adequate ventilation. Keep people away from and uspill/leak. Avoid inhalation, ingestion and contact with skin a When workers are facing concentrations above the exposunust use appropriate certified respirators. Ensure clean-up conducted by trained personnel only. Refer to protective metisted in sections 7 and 8.	and eyes. re limit they is
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 combustible absorbent material, (e.g. sand, earth, diatomate earth, vermiculite) and place in container for disposal accor ocal / national regulations (see section 13). For large spills spilled material or otherwise contain material to ensure rune each a waterway.	ceous ding to , dike
Product AT USE DILUTION Personal precautions, protective equipment and emergency procedures	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 combustible absorbent material, (e.g. sand, earth, diatomate earth, vermiculite) and place in container for disposal accor- ocal / national regulations (see section 13). For large spills spilled material or otherwise contain material to ensure run- reach a waterway.	ceous ding to , dike

SECTION 7. HANDLING AND STORAGE

Product AS SOLD Advice on safe handling	: Do not ingest. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not get in eyes, on skin, or on clothing.	
Conditions for safe storage	: Do not store near acids. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.	
Storage temperature	: 10 °C to 50 °C	
Product AT USE DILUTION		

Advice on safe handling	:	Wash hands thoroughly after handling. Do not get in eyes, on skin, or on clothing.
Conditions for safe storage	:	Do not store near acids. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD Ingredients with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Sodium hydroxide	1310-73-2	TWA	2 mg/m3	TH OEL
Engineering measures		e exhaust ventila ccupational expo	tion system. Maintair sure standards.	air concentrations
Personal protective equip	oment			
Eye protection	: Safety g Face-sh			
Hand protection	Standar Laminat Nitrile Unsupp PVC Natural Neopres Gloves	d glove type. te film orted neoprene rubber ne/natural rubbe	ded and replaced if the	nent: nere is any indication of
Skin protection		al protective equi oggles and prote		uitable protective gloves,
Respiratory protection			g concentrations above trified respirators.	ve the exposure limit they
Hygiene measures	practice Wash fa Provide	. Remove and wace, hands and a suitable facilities		othing before re-use. oughly after handling. or flushing of the eyes
Product AT USE DILUTIO Engineering measures	: Effective	e exhaust ventila ccupational expo	tion system. Maintair osure standards.	air concentrations
Personal protective equipment				
Eye protection	: Safety g Face-sh			
Hand protection		d glove type.	onal protective equipr	nent:

	PVC Natural rubber Neoprene gloves Unsupported neoprene Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	: No special protective equipment required.
Respiratory protection	: No personal respiratory protective equipment normally required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION	
Appearance	: liquid	liquid	
Color	: clear, light brown	colorless	
Odor	: odorless	odorless	
рН	: 12.0 - 13.0, (100 %)	12.0 - 13.5	
Flash point	: Not applicable		
Odor Threshold	: No data available		
Melting point/freezing point	: No data available		
Initial boiling point and boiling range	: > 100 °C		
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	: 1.17 - 1.23		
Water solubility	: No data available		
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	:	No dangerous reaction known under conditions of normal use.	
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 Nitrogen oxides (NOx) Sulfur oxides	
SECTION 11. TOXICOLOGICAL INFORMATION			
Information on likely routes of exposure	:	Inhalation, Eye contact, Skin contact	
Potential Health Effects			
Product AS SOLD Eyes	:	Causes serious eye damage.	

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	:	Suspected of causing cancer.
Product AT USE DILUTION		
Eyes	:	Causes serious eye irritation.
Skin	:	Causes skin irritation.
Ingestion	:	Health injuries are not known or expected under normal use.
Inhalation	:	Health injuries are not known or expected under normal use.
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, Irritation

Skin contact	: Redness, Pain, Irritation	
Ingestion	: No symptoms known or expected.	
Inhalation	: No symptoms known or expected.	
Toxicity		
Product AS SOLD Product		
Acute oral toxicity	: Acute toxicity estimate : > 5,000 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 daphnia and other aquatic invertebrates	:	Sodium hydroxide 48 h EC50: 40 mg/l		
Persistence and degradability				
Product AS SOLD Readily biodegradable.				

Product AT USE DILUTION Readily 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	:	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.
		The product should not be allowed to enter drains, water courses or the soil.
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	:	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	
UN number	: 1824
Description of the goods	: SODIUM HYDROXIDE SOLUTION
Class	: 8
Packing group	: 11
Environmentally hazardous	: no

Air transport (IATA)

Contact Regulatory for air freight eligibility

Sea transport (IMDG/IMO)

UN number : 1824

Description of the goods :	SODIUM HYDROXIDE SOLUTION
Class	8
Packing group	II
Marine pollutant	no

SECTION 15. REGULATORY INFORMATION

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) :

This product contains one or several components listed in the Canadian NDSL.

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) :

not determined

SECTION 16. OTHER INFORMATION

Issuing date	: 06.03.2020
Version	EXPERIMENTAL SDS
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.