

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	โทแพ็คช ์ 66 TOPAX 66
Other means of identification	:	Not applicable
Recommended use	:	Cleaning product
Restrictions on use	:	Reserved for industrial and professional use.
Product dilution information	:	2.0 % - 5.0 %
Company	:	Ecolab Ltd. 101/97 Navanokorn Industrial Estate, Klongnueng Klongluang, Pathumtanee 12120 Thailand Telephone : +66-2909-7030 Fax : +66-2909-2274
Emergency telephone	:	+1-651-222-5352 (United States)
Issuing date	:	15.03.2016

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD Skin corrosion/irritation Serious eye damage/eye irritation Acute aquatic toxicity Corrosive to metals	 Category 1 Category 1 Category 1 Category 1 Category 1
Product AT USE DILUTION Skin corrosion/irritation Serious eye damage/eye irritation	: Category 1 : Category 1

Acute aquatic toxicity : Category 3

GHS label elements

Product AS SOLD Hazard pictograms	:	
Signal Word	:	Danger
Hazard Statements	:	Causes severe skin burns and eye damage. Very toxic to aquatic life.
Precautionary Statements	:	Prevention: Wash skin thoroughly after handling. Avoid release to the

	environment. Wear protective gloves/ protective clothing/ eye protection/ face protection. 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. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse. Collect spillage. 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. Harmful to aquatic life.
Precautionary Statements	 Prevention: Wash skin thoroughly after handling. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection. 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. 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	: None known.
SECTION 3. COMPOSITION/	INFORMATION ON INGREDIENTS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD Pure substance/mixture :	Mixture		
Chemical name		CAS-No.	Concentration (%)
sodium hydroxide sodium hypochlorite		1310-73-2 7681-52-9	1 - 5 1 - 5

Product AT USE DILUTION Chemical name sodium hydroxide sodium hypochlorite amines, coco alkyldimethyl, n-4		CAS-No. 1310-73-2 7681-52-9 61788-90-7	Concentration (%) 0.1 - 1 0.1 - 1 0.1 - 1
	JUNES		
Product AS SOLD In case of eye contact	least 15 minu		, also under the eyelids, for at ses, if present and easy to do. n immediately.
In case of skin contact	a mild soap if		ater for at least 15 minutes. Use before reuse. Thoroughly clean tion immediately.
If swallowed		with water. Do NOT induc nouth to an unconscious p	ce vomiting. Never give person. Get medical attention
If inhaled	: Remove to fr symptoms or		cally. Get medical attention if
Protection of first-aiders	: If potential fo protective eq		Section 8 for specific personal
Notes to physician	: Treat sympto	matically.	
Most important symptoms and effects, both acute and delayed	: See Section symptoms.	11 for more detailed inforr	nation on health effects and
Product AT USE DILUTION			
In case of eye contact	least 15 minu		, also under the eyelids, for at ses, if present and easy to do. n immediately.
In case of skin contact	a mild soap i		ater for at least 15 minutes. Use before reuse. Thoroughly clean tion immediately.
If swallowed			ce vomiting. Never give person. Get medical attention
If inhaled	: Remove to fr symptoms or		cally. Get medical attention if

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 Oxides of phosphorus
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, 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.
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 : 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. Mixing this product with acid or ammonia releases chlorine gas.

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	:	0 °C to 45 °C
Product AT USE DILUTION 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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
sodium hydroxide	1310-73-2	TWA	2 mg/m3	TH OEL
Engineering measures			ation system. Maintair osure standards.	n air concentrations
Personal protective equip	oment			
Eye protection	: Safety g Face-sh			
Hand protection	Standar Gloves	d glove type.		ment: here is any indication of
Skin protection		al protective equ oggles and prot		uitable protective gloves,
Respiratory protection			g concentrations abo ertified respirators.	ve the exposure limit they
Hygiene measures	practice Wash fa Provide	e. Remove and vace, hands and a suitable facilitie		othing before re-use. roughly after handling. or flushing of the eyes
Product AT USE DILUTIO Engineering measures	: Effectiv		ation system. Maintain osure standards.	n air concentrations
Personal protective equip	oment			
Eye protection	: Safety g Face-sh			
Hand protection	: Wear th	e following pers	onal protective equip	ment:

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	Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: clear, light yellow	light yellow
Odor	: Chlorine	Chlorine
рН	: 13.0 - 14.0, 100 %	12.0 - 14.0
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	: 1.135 - 1.17	
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
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: Stable under normal conditions.

TOPAX 66	
Possibility of hazardous reactions	: Mixing this product with acid or ammonia releases chlorine gas.
Conditions to avoid	: None known.
Incompatible materials	: Acids Organic materials
Hazardous decomposition products	 Decomposition products may include the following materials: Carbon oxides Oxides of phosphorus

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	: Health injuries are not known or expected under normal use.		
Skin	: Health injuries are not known or expected under normal use.		
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			

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	: No symptoms known or expected.
Skin contact	: No symptoms known or expected.
Ingestion	: No symptoms known or expected.

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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	
Ingredients		
Acute inhalation toxicity	 sodium hypochlorite 4 h LC50 Rat: > 5.25 mg/l 	

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD Ecotoxicity

LEGIONICITY		
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	
Ingredients		
Toxicity to fish	: sodium hypochlorite 48 h EC50: 0.071 mg/l	
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			
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.			
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.			
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.			
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 Description of the goods	 : 1824 : SODIUM HYDROXIDE SOLUTION (sodium hydroxide)
Class	: 8
Packing group	: 11
Hazchem Code	: -
Environmentally hazardous	: yes

Air transport (IATA)

Contact Regulatory for air freight eligibility

Sea transport (IMDG/IMO)		
UN number	:	1824
Description of the goods	:	SODIUM HYDROXIDE SOLUTION (sodium hydroxide)

SAFETY DATA SHEET

TOPAX 66

Class	:	8
Packing group	:	II
Marine pollutant	:	yes

SECTION 15. REGULATORY INFORMATION

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

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) :

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

SECTION 16. OTHER INFORMATION

Issuing date	:	15.03.2016
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.