

# SAFETY DATA SHEET

ECOLAB®

TOPAX 56

## 1. Chemical product and company identification

**Chinese name** : 食品工業用酸性泡沫清潔劑  
**Product name** : TOPAX 56  
**Other names** : None.  
**Code** : 926790  
**Recommended use and restrictions** : Surface cleaner  
Use only for the purpose on the product label.

**Manufacturer/Supplier** : Ecolab Limited  
**Address/Telephone** : 6F, No. 13, Sec. 2, Peitou Rd., Peitou Dist.,  
Taipei, 112, Taiwan, R.O.C.  
(02) 2898-4800

**Emergency telephone number** : 1-651-222-5352 (in USA)

## 2. Hazards identification

**Product hazard classification** : SKIN CORROSION/IRRITATION - Category 1A  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
TOXIC TO REPRODUCTION - Category 1B  
AQUATIC TOXICITY (ACUTE) - Category 3

### Label contents

**Symbol** :



**Signal word** :

Danger

**Hazard warning message** :

Causes severe skin burns and eye damage.  
May damage fertility or the unborn child.  
Harmful to aquatic life.

**Precautionary statements**

**Prevention**

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye/face protection. Wear protective clothing. Avoid release to the environment. Wash thoroughly after handling.

**Response**

: Immediately call a POISON CENTER or doctor/physician. 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. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical attention/advice.

**Other hazards**

: Not available.

### 3. Composition/information on ingredients

**Nature of material** : Mixture  
**Chemical properties** : Surface cleaner

Hazardous ingredients	Concentration Range (%)	CAS number
phosphoric acid	20 - 50	7664-38-2
2-(2-butoxyethoxy)ethanol	1 - 5	112-34-5
amines, coco alkyldimethyl, n-oxides	1 - 5	61788-90-7
ethanediol	< 1.0	107-21-1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### 4. First aid measures

#### First aid measures for different exposure routes

- Eye contact** : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** : If inhaled, remove to fresh air. If exposed person is not breathing, give artificial respiration or oxygen applied by trained personnel. Get medical attention immediately.
- Ingestion** : If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

#### Most important symptoms/effects, acute and delayed

- Eye contact** : Causes serious eye damage.
- Skin contact** : Causes severe burns.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Ingestion** : May cause burns to mouth, throat and stomach.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See toxicological information (section 11)

### 5. Fire-fighting measures

**Suitable fire extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Specific hazards that may be encountered during fire-fighting** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
phosphorus oxides

## 5. Fire-fighting measures

- Specific fire-fighting methods** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Stop leak if without risk. Use suitable protective equipment. Keep unnecessary personnel away. Do not touch or walk through spilled material.
- Environmental precautions** : May be harmful to the environment if released in large quantities. Do not allow to enter drains or watercourses. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain it to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Contaminated absorbent material may pose the same hazard as the spilled product.

## 7. Handling and storage

- Handling** : Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Use only with adequate ventilation. Wash thoroughly after handling.
- Storage** : Keep out of reach of children. Keep container tightly closed. Keep container in a cool, well-ventilated area.  
Do not store below the following temperature: -10°C

## 8. Exposure controls/personal protection

### Control parameters

Ingredient name	Exposure limits
phosphoric acid	<b>Taiwan Council of Labor Affairs (Taiwan, 12/2003).</b> STEL: 2 mg/m <sup>3</sup> 15 minute(s). TWA: 1 mg/m <sup>3</sup> 8 hour(s).

- Biological indicator** : Not available.
- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
- Eye protection** : Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.
- Hand protection** : Use chemical-resistant, impervious gloves.
- Skin protection** : Use synthetic apron, other protective equipment as necessary to prevent skin contact.

## 8. Exposure controls/personal protection

**Respiratory protection** : A respirator is not needed under normal and intended conditions of product use.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: Liquid. [Liquid.]
<b>Color</b>	: Brown. [Dark]
<b>Odor</b>	: Odorless.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: 1.9 to 2.1 [Conc. (% w/w): 100%]
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: >100°C (>212°F)
<b>Flash point</b>	: > 100°C
<b>Evaporation rate (butyl acetate = 1)</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Explosion limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Relative density</b>	: 1.21 to 1.25 (Water = 1)
<b>Solubility</b>	: Easily soluble in the following materials: cold water and hot water.
<b>Octanol/water partition coefficient</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.

## 10. Stability and reactivity

<b>Stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Avoid release to the environment.
<b>Materials to avoid</b>	: Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Reactive or incompatible with the following materials: alkalis
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

**Route of exposure** : Skin contact, Eye contact, Inhalation, Ingestion

### Symptoms

<b>Eye contact</b>	: Adverse symptoms may include the following: pain watering redness
<b>Skin contact</b>	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
<b>Inhalation</b>	: No specific data.

## 11. Toxicological information

**Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Acute toxicity

**Eye contact** : Causes serious eye damage.

**Skin contact** : Causes severe burns.

**Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

**Ingestion** : May cause burns to mouth, throat and stomach.

### Toxicity data

Product/ingredient name	Result	Species	Dose	Exposure
phosphoric acid	LD50 Oral	Mouse - Male	1.25 gm/kg	-
	LD50 Oral	Rat	1.25 gm/kg	-
2-(2-butoxyethoxy)ethanol	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Oral	Mouse	6050 mg/kg	-
	LD50 Oral	Rat	5660 mg/kg	-
	LD50 Oral	Rat	4500 mg/kg	-
	LD50 Oral	Mouse	4500 mg/kg	-
	LD50 Oral	Mouse	2400 mg/kg	-
	LD50 Oral	Rat	6050 mg/kg	-
amines, coco alkyldimethyl, n-oxides ethanediol	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Dermal	Rabbit	9530 uL/kg	-
	LD50 Oral	Rat	4700 mg/kg	-
	LD50 Oral	Mouse	5500 mg/kg	-

### Chronic toxicity

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## 12. Ecological information

**Ecotoxicity** : This material is harmful to aquatic life.

### Aquatic and terrestrial toxicity

Product/ingredient name	Test	Result	Species	Exposure
2-(2-butoxyethoxy)ethanol	Mortality	Acute LC50 1300 mg/L	Fish	96 hours
amines, coco alkyldimethyl, n-oxides	-	Acute EC50 8 mg/L	Daphnia	48 hours
	-	Acute EC50 4.4 mg/L	Daphnia	48 hours
	-	Acute EC50 <1 mg/L	Algae	72 hours
	-	Acute EC50 0.8 mg/L	Algae	72 hours
	-	Acute LC50 14 mg/L	Fish	96 hours
	-	Acute LC50 10 to 100 mg/L	Fish	96 hours
ethanediol	Mortality	Acute LC50 53000 mg/L	Fish	96 hours
	Mortality	Acute LC50 49000 mg/L	Fish	96 hours

## 12. Ecological information

Mortality	Acute LC50 41000 mg/L	Fish	96 hours
Mortality	Acute LC50 27540 mg/L	Fish	96 hours
Mortality	Acute LC50 >10000 mg/L	Fish	96 hours
Mortality	Acute LC50 8050 mg/L	Fish	96 hours

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Not available.				

<u>Product/ingredient name</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>
Not available.			

### Bioaccumulative potential

<u>Product/ingredient name</u>	<u>LogP<sub>ow</sub></u>	<u>BCF</u>	<u>Potential</u>
Not available.			

**Soil mobility** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

UN number : UN1805

Proper shipping name : PHOSPHORIC ACID, SOLUTION

Class : 8

Packing group : III

Marine pollutant (Yes / No) : Not a pollutant.

Specific precautionary transport measures and conditions : -

**See shipping documents for specific transportation information.**

## 15. Regulatory information

### TCSCA List of toxic chemicals

<u>Listed no.</u>	<u>Series no.</u>	<u>Product name</u>	<u>RQ</u>	<u>Class</u>
Not available.				

**List of chemicals for which manufacturing or handling is defined as "work specially hazardous to health"** : Not available.

**List of chemicals reputed to be a "threat of imminent danger"** : This product contains substances considered to be a "Threat of imminent danger": phosphoric acid, ethanediol, sulphuric acid, propan-2-ol.

**LSHL Article 21** : Not available.

**Safety, health and environmental regulations specific for the product** : Not available.

**References** : -Regulation of Labeling and Hazard Communication of Dangerous and Harmful Materials.  
-Labor Safety and Health Act.

## 16. Other information

### History

**Date of issue** : 25 November 2008

**Date of previous issue** : No previous validation

**Organization that prepared the MSDS** : Ecolab, Inc.

**Person who prepared the MSDS** : Regulatory Affairs

Indicates information that has changed from previously issued version.

### Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, **NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.**