



## SAFETY DATA SHEET

AC-101

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AC-101  
Other means of identification : Not applicable.  
Recommended use : Cleaning product  
Restrictions on use : Reserved for industrial and professional use.  
Product dilution information : 1.5 % - 5.0 %

Company : Ecolab Sdn. Bhd.  
Suite 12-01, 12-02 & 12-03A, Level 12, The Pinnacle, Persiaran Lagoon, Bandar Sunway  
46150 Petaling Jaya, Selangor Malaysia  
603-7628 5200  
Emergency telephone number : 1-800-80-1110  
Issuing date : 18.07.2014

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

#### Product AS SOLD

Corrosive to metals : Category 1  
Skin corrosion : Category 1  
Serious eye damage/eye irritation : Category 1

#### Product AT USE DILUTION

Skin corrosion : Category 1  
Serious eye damage/eye irritation : Category 1

#### GHS Label element

#### Product AS SOLD

Hazard pictograms :



Signal Word : Danger  
Hazard Statements : Causes severe skin burns and eye damage.  
May be corrosive to metals.  
Precautionary Statements : **Prevention:** Wash skin thoroughly after handling. Wear protective gloves/protective clothing/ eye protection/ face protection. Keep only in original container.  
**Response:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing.

# SAFETY DATA SHEET

AC-101

Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 or doctor/ physician. 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 :

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): 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. 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 or doctor/ physician. Wash contaminated clothing before reuse.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

Other hazards :

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Product AS SOLD

Pure substance/mixture

: Mixture

### Chemical Name

sodium hydroxide

**CAS-No.**

1310-73-2

**Concentration: (%)**

30 - 60

### Product AT USE DILUTION

### Chemical Name

sodium hydroxide

**CAS-No.**

1310-73-2

**Concentration: (%)**

1 - 5

## SECTION 4. FIRST AID MEASURES

### Product AS SOLD

In case of eye contact

: Rinse immediately with plenty of water, also under the eyelids, for at

# SAFETY DATA SHEET

AC-101

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.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

## 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.

See toxicological information (Section 11)

## SECTION 5. FIREFIGHTING 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 firefighting : Exposure to decomposition products may be a hazard to health.

Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides

Special protective equipment for firefighters : 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.

# SAFETY DATA SHEET

AC-101

## 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/vapours/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

: Do not ingest. Do not breathe dust/fume/gas/mist/vapours/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

# SAFETY DATA SHEET

AC-101

## Product AS SOLD

### Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
sodium hydroxide	1310-73-2		2 mg/m <sup>3</sup>	MY OEL

Engineering measures : Effective exhaust ventilation system Maintain air concentrations below occupational exposure standards.

### Personal protective equipment

Eye protection	: Safety goggles Face-shield
Hand protection	: 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	: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Respiratory protection	: No personal respiratory protective equipment normally required.
Hygiene measures	: 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 : Effective exhaust ventilation system Maintain air concentrations below occupational exposure standards.

### Personal protective equipment

Eye protection	: Safety goggles Face-shield
Hand protection	: 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	: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
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
Colour	: clear, tan	light yellow
Odour	: slight	odourless

# SAFETY DATA SHEET

## AC-101

pH	:	13.0 - 14.0, 100 %	12.0 - 14.0
Flash point	:	Not applicable.	
Odour 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	
Vapour pressure	:	no data available	
Relative vapour density	:	no data available	
Relative density	:	1.505 - 1.535	
Water solubility	:	soluble	
Solubility in other solvents	:	no data available	
Partition coefficient: n-octanol/water	:	no data available	
Auto-ignition 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	:	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 Organic materials
Hazardous decomposition products	:	Decomposition products may include the following materials: Carbon oxides

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

### Potential Health Effects

# SAFETY DATA SHEET

AC-101

## Product AS SOLD

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
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.

## Product AT USE DILUTION

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
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	: No symptoms known or expected.

### Product AT USE DILUTION

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: No symptoms known or expected.

## Toxicity

### Product AS SOLD

Acute oral toxicity	: no data available
Acute inhalation toxicity	: no data available
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

# SAFETY DATA SHEET

## AC-101

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 : This product has no known ecotoxicological effects.

#### 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

no data available

#### 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.

#### Disposal considerations

: Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse empty containers.

### 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-

# SAFETY DATA SHEET

AC-101

use empty containers.

## 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 : II  
Hazchem Code : 2R  
Environmentally hazardous : No

#### Sea Transport (IMDG/IMO)

UN number : 1824  
Description of the goods : SODIUM HYDROXIDE SOLUTION  
Class : 8  
Packing group : II  
Marine pollutant : No

### Product AT USE DILUTION

Not intended for transport.

## SECTION 15. REGULATORY INFORMATION

### National Regulations

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulation 2013  
Occupational Safety and Health Act 1994  
Environmental Quality Act 1974

**The components of this product are reported in the following inventories:**

#### 1907/2006 (EU) :

not determined

#### Switzerland. New notified substances and declared preparations :

Switzerland. Federal Health Agency, Giffliste 1 (Stoffe) On the inventory, or in compliance with the inventory

#### United States TSCA Inventory :

On TSCA Inventory

#### Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL.

#### Australia. Industrial Chemical (Notification and Assessment) Act :

On the inventory, or in compliance with the inventory

#### New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand :

On the inventory, or in compliance with the inventory

# SAFETY DATA SHEET

AC-101

**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 :**  
On the inventory, or in compliance with the inventory

## SECTION 16. OTHER INFORMATION

Issuing date : 18.07.2014  
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.