

The logo for Virtue Plus, featuring the word "VIRTUE" in a blue, sans-serif font, followed by a black plus sign. The background of the entire page is a low-angle shot of a modern glass skyscraper with a grid-like pattern of windows and structural elements.

VIRTUE +

# Ecosol Plus

## Safety Data Sheet

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Connect online  
@ Virtue Plus



Printing date 05.04.2019

# Safety Data Sheet

according to WHS Regulations

Revision: 05.04.2019

## 1 Identification

**Product Name:** ECOSOL PLUS**Other Means of Identification:** Mixture**Recommended Use of the Chemical and Restriction on Use:**

Liquid cleanser for industrial dishwashing-machines.

**Details of Manufacturer or Importer:**

Virtue Plus

13 Fawkner Avenue,

Kings Meadows, Tas, 7249

**Phone Number:** 03 6344 8400**Emergency telephone number:** 1800 205 506, +64 7958 2372

## 2 Hazard(s) Identification

**Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



corrosion

Skin Corrosion/Irritation 1A H314 Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.



STOT SE 3

H335 May cause respiratory irritation.

**Signal Word** Danger**Hazard Statements**

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

**Precautionary Statements**

P260 Do not breathe dusts or mists.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

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P501

Dispose of contents/container in accordance with local/regional/national regulations.

### 3 Composition and Information on Ingredients

**Chemical Characterization: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

|                |   |           |
|----------------|---|-----------|
| CAS: 1310-73-2 | Sodium hydroxide  | 10 - <25% |
|                | ⚠ Skin Corrosion/Irritation 1A, H314; ⚠ STOT SE 3, H335 |           |

### 4 First Aid Measures

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

**Eye Contact:**

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

**Ingestion:**

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Symptoms Caused by Exposure:**

Inhalation: May cause burns or irritation to the respiratory system, coughing and shortness of breath.

Skin Contact: Causes severe skin burns.

Eye Contact: Causes serious eye damage.

Ingestion: May cause burns or irritation to the gastrointestinal system.

### 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Water fog, foam, ABC powder or carbon dioxide. Do not use full water jet.

**Specific Hazards Arising from the Chemical:**

No hazardous decomposition products known.

This product is not flammable.

Containers close to fire should be removed only if safe to do so.

**Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

### 6 Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Rinse spill area with plenty of water.

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### 7 Handling and Storage

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from extreme temperatures. Do not expose to temperatures below -5 °C. Keep away from oxidising agents, acids and aluminium.

Recommended storage temperature: 5 - 25 °C.

Storage life: 3 years

### 8 Exposure Controls and Personal Protection

**Exposure Standards:****CAS: 1310-73-2 Sodium hydroxide**

|     |                                      |
|-----|--------------------------------------|
| NES | Peak limitation: 2 mg/m <sup>3</sup> |
| WES | Peak limitation: 2 mg/m <sup>3</sup> |

**Engineering Controls:**

Maintain air concentration below occupational exposure standards, providing adequate ventilation.

**Respiratory Protection:**

Respiratory protection is not required under normal use conditions.

Use an approved respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**

Alkali-resistant nitrile or neoprene gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

### 9 Physical and Chemical Properties

**Appearance:****Form:**

Liquid

**Colour:**

Clear yellow

**Odour:**

Strong, product specific

**Odour Threshold:**

No information available

**pH-Value at 20 °C:**

&gt;12 (1%)

**Melting point/freezing point:**

-4 - +4 °C

**Initial Boiling Point/Boiling Range:**

~100 °C

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|   |                           |
|---|---------------------------|
| <b>Flash Point:</b>                             | >100 °C                   |
| <b>Flammability:</b>                            | Product is not flammable. |
| <b>Auto-ignition Temperature:</b>               | Not applicable            |
| <b>Decomposition Temperature:</b>               | Not applicable            |
| <b>Explosion Limits:</b>                        |                           |
| <b>Lower:</b>                                   | Not applicable            |
| <b>Upper:</b>                                   | Not applicable            |
| <b>Vapour Pressure:</b>                         | Not determined.           |
| <b>Density at 20 °C:</b>                        | 1.30 g/cm <sup>3</sup>    |
| <b>Vapour Density:</b>                          | Not determined.           |
| <b>Evaporation Rate:</b>                        | Not determined.           |
| <b>Solubility in Water:</b>                     | Not determined            |
| <b>Partition Coefficient (n-octanol/water):</b> | Not determined.           |
| <b>Viscosity:</b>                               | Not determined            |

### 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:** Extreme temperatures.

**Incompatible Materials:** Oxidising agents, acids and aluminium.

**Hazardous Decomposition Products:** No hazardous decomposition products known.

### 11 Toxicological Information

**Toxicity:**

**LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:**

**CAS: 1310-73-2 Sodium hydroxide**

|      |                  |                     |
|------|------------------|---------------------|
| Oral | LD <sub>50</sub> | 5,800 mg/kg (mouse) |
|      |                  | 2,000 mg/kg (rat)   |

#### Acute Health Effects

**Inhalation:** May cause burns or irritation to the respiratory system, coughing and shortness of breath.

**Skin:** Causes severe skin burns.

**Eye:** Causes serious eye damage.

**Ingestion:** May cause burns or irritation to the gastrointestinal system.

**Skin Corrosion / Irritation:** Causes severe skin burns.

**Serious Eye Damage / Irritation:** Causes serious eye damage.

**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.

**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.

**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.

#### Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

#### Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

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**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No information available**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:** No information available

### 12 Ecological Information

**Ecotoxicity:****Aquatic toxicity:****CAS: 1310-73-2 Sodium hydroxide**

|                        |                           |
|------------------------|---------------------------|
| EC <sub>50</sub> /48 h | 40.38 mg/l (daphnia)      |
| LC <sub>50</sub> /96 h | 125 mg/l (mosquito fish)  |
|                        | 45.4 mg/l (rainbow trout) |

**Persistence and Degradability:** No further relevant information available.**Bioaccumulative Potential:** No further relevant information available.**Mobility in Soil:** No further relevant information available.**Other adverse effects:** No further relevant information available.

### 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

### 14 Transport Information

|   |                           |
|---|---------------------------|
| <b>UN Number</b>  | UN1824                    |
| <b>ADG, IMDG, IATA</b>  |                           |
| <b>Proper Shipping Name</b>                                       | SODIUM HYDROXIDE SOLUTION |
| <b>ADG, IMDG, IATA</b>  |                           |
| <b>Dangerous Goods Class</b>                                      |                           |
| <b>ADG Class:</b>   | 8 Corrosive substances.   |
| <b>Packing Group:</b>   |                           |
| <b>ADG, IMDG, IATA</b>  | II                        |
| <b>EMS Number:</b>  | F-A,S-B                   |
| <b>Hazchem Code:</b>  | 2R                        |
| <b>Limited Quantities:</b>  | 1L                        |
| <b>Packagings &amp; IBCs - Packing Instruction:</b>               | P001, IBC02               |
| <b>Portable Tanks &amp; Bulk Containers - Instructions:</b>       | T7                        |
| <b>Portable Tanks &amp; Bulk Containers - Special Provisions:</b> | TP2                       |

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### 15 Regulatory Information

**Australian Inventory of Chemical Substances:**

CAS: 1310-73-2 | Sodium hydroxide

**Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:**

Poisons Schedule: 6

### 16 Other Information

**Date of Preparation or Last Revision:** 05.04.2019**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)
**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC<sub>50</sub>: Lethal concentration, 50 percentLD<sub>50</sub>: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Skin Corrosion/Irritation 1A: Skin corrosion/irritation – Category 1A

Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

**Disclaimer**

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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