## **SAFETY DATA SHEET**

**ACP Citrus Cleaner** 

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : ACP Citrus Cleaner Product code : 2-2240, #2, #12

Product description : Liquid hard surface cleaner

Product type : Liquid.

Other means of : Not available.

identification

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

#### **Identified uses**

Not applicable.

#### **Uses advised against**

Not applicable.

#### 1.3 Details of the supplier of the safety data sheet

Aqua ChemPacs, LLC 2693 Philmont Avenue Huntingdon Valley, PA 19006 (215)396-7200

e-mail address of person responsible for this SDS

: lab@chempacs.com

#### 1.4 Emergency telephone number

#### **National advisory body/Poison Center**

Telephone number :

**Supplier** 

Telephone number : 888-964-2080

Hours of operation :

Information limitations : Edit the content of sentence <GB Telephone Number - Supplier - Information

limitations> to define this output

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

<u>Classification according to UK CLP/GHS</u>

Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended. The hazard classification and label elements reflect the intrinsic properties of the

concentrated product as supplied, which is sealed in a water soluble sachet. The

following precautionary statements are applicable under conditions of the exposure

to the large quantities of product (spills over 5 gallons), or handling damaged

sachets (full skid). Handling undamaged pouches of product according to instructions does not present any exposure to concentrate, no PPE is required (applicable to Sections 5, 6 and 11 of the current SDS).

## **SECTION 2: Hazards identification**

Ingredients of unknown toxicity

89.5 percent of the mixture consists of component(s) of unknown acute dermal toxicity
 89.5 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

Hazard pictograms





Signal word : Danger

**Hazard statements**: Causes skin irritation.

Causes serious eye damage.

Toxic to aquatic life with long lasting effects.

**Precautionary statements** 

General : Read carefully and follow all instructions. Keep out of reach of children. If medical

advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Wear eye or face protection. Avoid release to the

environment. Wash thoroughly after handling.

Response : Collect spillage. Take off contaminated clothing and wash it before reuse. 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.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Supplemental label

elements

: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

#### **Special packaging requirements**

Containers to be fitted with child-resistant

: Not applicable.

fastenings

Tactile warning of danger : Not applicable.

#### 2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

: None known.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures : Mixture

| Product/ingredient name    | Identifiers   | %           | Classification   | Туре    |
|----------------------------|---|-------------|--|---------|
| Ethoxylated Fatty Alcohols | -   | Proprietary | Acute Tox. 4, H302<br>Eye Dam. 1, H318<br>Aquatic Chronic 2,<br>H411   | [1]     |
| Diol                       | -   | Proprietary | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319  | [1] [2] |
| 1,4-dioxane                | EC: 204-661-8<br>CAS: 123-91-1<br>Index: 603-024-00-5 | ≤0.1        | Flam. Liq. 2, H225 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 Aquatic Chronic 2, H411 EUH019 EUH066  | [1] [2] |
| ethylene oxide             | EC: 200-849-9<br>CAS: 75-21-8<br>Index: 603-023-00-X  | <0.1        | Flam. Gas 1A, H220 Press. Gas (Comp.), H280 Acute Tox. 3, H301 Acute Tox. 3, H331 Skin Corr. 1, H314 Eye Dam. 1, H318 Muta. 1B, H340 Carc. 1B, H350 Repr. 1B, H360Fd STOT SE 3, H335 STOT SE 3, H336 STOT RE 1, H372 (nervous system) Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above. | [1] [2] |

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### <u>I ype</u>

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

**Eye contact** 

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### **SECTION 4: First aid measures**

Skin contact

: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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.

#### 4.2 Most important symptoms and effects, both acute and delayed

#### **Over-exposure signs/symptoms**

**Eye contact** : Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

**Skin contact**: Adverse symptoms may include the following:

pain or irritation redness

blistering may occur

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

stomach pains

#### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

## **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

## 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide

#### 5.3 Advice for firefighters

### **SECTION 5: Firefighting measures**

Special protective actions for fire-fighters

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.

### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## 6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

#### 6.3 Methods and materials for containment and cleaning up

**Small spill** 

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 6.4 Reference to other sections

See Section 1 for emergency contact information.
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

## **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 7.1 Precautions for safe handling

**Protective measures** 

: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## **SECTION 7: Handling and storage**

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

#### **Seveso Directive - Reporting thresholds**

#### **Danger criteria**

|    | Notification and MAPP threshold | Safety report threshold |
|----|---------------------------------|-------------------------|
| E2 | 200 tonne                       | 500 tonne               |

#### 7.3 Specific end use(s)

Recommendations : Not available.
Industrial sector specific : Not available.
solutions

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### Occupational exposure limits

| Product/ingredient name | Exposure limit values                                  |
|-------------------------|--|
| Diol                    | EH40/2005 WELs (United Kingdom (UK), 8/2018).          |
|                         | STEL: 123 mg/m³ 15 minutes.                            |
|                         | STEL: 25 ppm 15 minutes.                               |
|                         | TWA: 123 mg/m <sup>3</sup> 8 hours.                    |
|                         | TWA: 25 ppm 8 hours.                                   |
| 1,4-dioxane             | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| ,4-dioxane              | through skin.  |
|                         | TWA: 20 ppm 8 hours.                                   |
|                         | TWA: 73 mg/m³ 8 hours.                                 |
| ethylene oxide          | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed |
| •                       | through skin.  |
|                         | TWA: 1 ppm 8 hours.                                    |
|                         | TWA: 1.8 mg/m³ 8 hours.                                |

#### **Biological exposure indices**

No exposure indices known.

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

| Product/ingredient name    | Type | Exposure                | Value                 | Population         | Effects  |
|----------------------------|------|-------------------------|-----------------------|--------------------|----------|
| Ethoxylated Fatty Alcohols | DNEL | Long term Oral          | 25 mg/kg<br>bw/day    | General population | Systemic |
|                            | DNEL | Long term<br>Inhalation | 87 mg/m³              | General population | Systemic |
|                            | DNEL | Long term<br>Inhalation | 294 mg/m³             | Workers            | Systemic |
|                            | DNEL | Long term Dermal        | 1250 mg/<br>kg bw/day | General population | Systemic |
|                            | DNEL | Long term Dermal        | 2080 mg/<br>kg bw/day | Workers            | Systemic |
| Diol                       | DNEL | Long term Oral          | 1 mg/kg<br>bw/day     | General population | Systemic |
|                            | DNEL | Long term Dermal        | 1 mg/kg<br>bw/day     | General population | Systemic |
|                            | DNEL | Long term Dermal        | 2 mg/kg               | Workers            | Systemic |

## **SECTION 8: Exposure controls/personal protection**

|             |       |                         | bw/day                |            |            |
|-------------|-------|-------------------------|-----------------------|------------|------------|
|             | DNEL  | Long term               | 3.5 mg/m <sup>3</sup> | General    | Systemic   |
|             | DIVLL | Inhalation              | 0.0 mg/m              | population | Cystoffile |
|             | DNEL  | Long term               | 14 mg/m³              | Workers    | Systemic   |
|             | DIVLL | Inhalation              | 14 1119/111           | VVOIREIS   | Oysternic  |
|             | DNEL  |                         | 25 ma/m3              | General    | Local      |
|             | DINEL | Long term<br>Inhalation | 25 mg/m³              |            | Local      |
|             | DNE   |                         | 40 3                  | population | Lasal      |
|             | DNEL  | Short term              | 49 mg/m³              | General    | Local      |
|             | DATE  | Inhalation              | 40 / 3                | population |            |
|             | DNEL  | Long term               | 49 mg/m³              | Workers    | Local      |
|             | 5     | Inhalation              |                       |            |            |
|             | DNEL  | Short term              | 98 mg/m³              | Workers    | Local      |
|             |       | Inhalation              |                       |            |            |
| 1,4-dioxane | DNEL  | Long term Oral          | 0.24 mg/              | General    | Systemic   |
|             |       |                         | kg bw/day             | population |            |
|             | DNEL  | Long term Dermal        | 12 mg/kg              | General    | Systemic   |
|             |       |                         | bw/day                | population |            |
|             | DNEL  | Long term               | 18.25 mg/             | General    | Systemic   |
|             |       | Inhalation              | m³                    | population |            |
|             | DNEL  | Long term Dermal        | 21 mg/kg              | Workers    | Systemic   |
|             |       |                         | bw/day                |            |            |
|             | DNEL  | Short term              | 72 mg/m³              | General    | Local      |
|             |       | Inhalation              |                       | population |            |
|             | DNEL  | Long term               | 73 mg/m³              | Workers    | Systemic   |
|             |       | Inhalation              |                       |            |            |
|             | DNEL  | Short term              | 144 mg/m³             | Workers    | Local      |
|             |       | Inhalation              |                       |            |            |
|             |       |                         |                       |            |            |

#### **PNECs**

No PNECs available.

#### 8.2 Exposure controls

Appropriate engineering controls

: 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.

#### **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. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** 

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

## Skin protection Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** 

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## SECTION 8: Exposure controls/personal protection

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**Environmental exposure** controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### 9.1 Information on basic physical and chemical properties

#### **Appearance**

**Physical state** : Liquid. Color : Orange. Odor : Citrus [Slight] : Not available. **Odor threshold** : Not available. Melting point/freezing point Initial boiling point and boiling : Not available.

range

Flammability (solid, gas) : Not available. Upper/lower flammability or : Not available.

explosive limits

: Closed cup: Not applicable. [Product does not sustain combustion.] Flash point

Not available. **Auto-ignition temperature** : Not available. **Decomposition temperature** 

pН 7 to 8.5 at RTU dilution

Not available. **Viscosity** 

Solubility(ies)

| _ |       |                               |
|---|-------|-------------------------------|
|   | Media | Result                        |
|   |       | Easily soluble Easily soluble |

Solubility in water Completely soluble in water

Miscible with water Yes.

Partition coefficient: n-octanol/

water

: Not applicable.

Vapor pressure : Not available.

**Relative density** 0.975

: 0.975 g/cm<sup>3</sup> [23°C (73.4°F)] **Density** 

Not available. Vapor density **Explosive properties** : Not available. : Not available. **Oxidizing properties** 

**Particle characteristics** 

Median particle size : Not applicable.

## SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

**10.5 Incompatible materials**: No specific data.

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

| Product/ingredient name    | Result               | Species | Dose       | Exposure |
|----------------------------|----------------------|---------|------------|----------|
| Ethoxylated Fatty Alcohols | LD50 Oral            | Rat     | 1378 mg/kg | -        |
| Diol                       | LD50 Oral            | Rat     | 3700 mg/kg | -        |
| 1,4-dioxane                | LD50 Oral            | Rat     | 4200 mg/kg | -        |
| ethylene oxide             | LC50 Inhalation Gas. | Rat     | 800 ppm    | 4 hours  |
|                            | LD50 Oral            | Rat     | 72 mg/kg   | -        |

**Conclusion/Summary**: Not available.

#### **Acute toxicity estimates**

| Product/ingredient name    | Oral (mg/<br>kg) | Dermal<br>(mg/kg) | Inhalation<br>(gases)<br>(ppm) | Inhalation<br>(vapors)<br>(mg/l) | Inhalation<br>(dusts<br>and mists)<br>(mg/l) |
|----------------------------|------------------|-------------------|--------------------------------|----------------------------------|--|
| ACP Citrus Cleaner         | 2041.5           | N/A               | N/A                            | N/A                              | N/A  |
| Ethoxylated Fatty alcohols | 1378             | N/A               | N/A                            | N/A                              | N/A  |
| Diol                       | 3700             | N/A               | N/A                            | N/A                              | N/A  |
| 1,4-dioxane                | 4200             | N/A               | N/A                            | N/A                              | N/A  |
| ethylene oxide             | 100              | N/A               | 700                            | N/A                              | N/A  |

#### **Irritation/Corrosion**

| Product/ingredient name | Result                   | Species    | Score | Exposure     | Observation |
|-------------------------|--------------------------|------------|-------|--------------|-------------|
| Diol                    | Skin - Mild irritant     | Rabbit     | -     | 465 mg       | -           |
|                         | Skin - Moderate irritant | Rabbit     | -     | 24 hours 500 | -           |
|                         |                          |            |       | mg           |             |
| 1,4-dioxane             | Eyes - Moderate irritant | Guinea pig | -     | 10 ug        | -           |
|                         | Eyes - Moderate irritant | Rabbit     | -     | 24 hours 100 | -           |
|                         |                          |            |       | mg           |             |
|                         | Eyes - Severe irritant   | Rabbit     | -     | 100 mg       | -           |
|                         | Skin - Mild irritant     | Rabbit     | -     | 515 mg       | -           |
| ethylene oxide          | Eyes - Moderate irritant | Rabbit     | -     | 6 hours 18   | -           |
|                         |                          |            |       | mg           |             |

**Conclusion/Summary** 

: Not available.

**Sensitization** 

**Conclusion/Summary** 

: Not available.

**Mutagenicity** 

**Conclusion/Summary** 

: Not available.

Carcinogenicity

**Conclusion/Summary**: Not available.

## SECTION 11: Toxicological information

**Reproductive toxicity** 

Conclusion/Summary : Not available.

**Teratogenicity** 

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category   | Route of exposure | Target organs                |
|-------------------------|------------|-------------------|------------------------------|
| 1,4-dioxane             | Category 3 |                   | Respiratory tract irritation |
| ethylene oxide          | Category 3 |                   | Respiratory tract irritation |
|                         | Category 3 |                   | Narcotic effects             |

#### Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category   | Route of exposure | Target organs  |
|-------------------------|------------|-------------------|----------------|
| ethylene oxide          | Category 1 | -                 | nervous system |

#### **Aspiration hazard**

Not available.

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

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

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

**Skin contact** : Causes skin irritation.

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

Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

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

stomach pains

#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

## **SECTION 11: Toxicological information**

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

| Product/ingredient name    | Result                               | Species  | Exposure |
|----------------------------|--------------------------------------|--|----------|
| Ethoxylated Fatty Alcohols | Acute EC50 5.36 mg/l Fresh water     | Crustaceans - Water flea -<br>Ceriodaphnia dubia - Neonate     | 48 hours |
|                            | Acute EC50 2686 μg/l Fresh water     | Daphnia - Water flea - Daphnia<br>magna - Neonate              | 48 hours |
|                            | Acute LC50 8500 μg/l Fresh water     | Fish - Fathead minnow - Pimephales promelas                    | 96 hours |
| Diol                       | Acute EC50 2800000 μg/l Fresh water  | Crustaceans - Water flea -<br>Ceriodaphnia reticulata - Larvae | 48 hours |
|                            | Acute EC50 3200000 μg/l Fresh water  | Daphnia - Water flea - Daphnia<br>magna - Larvae               | 48 hours |
|                            | Acute LC50 8000000 µg/l Marine water | Fish - Bleak - Alburnus alburnus                               | 96 hours |
| 1,4-dioxane                | Acute LC50 1.5 mg/l Fresh water      | Daphnia - Water flea - Daphnia<br>magna - Neonate              | 48 hours |
|                            | Acute LC50 6700000 μg/l Marine water | Fish - Inland silverside - Menidia beryllina                   | 96 hours |
|                            | Chronic NOEC 145 mg/l Fresh water    | Fish - Fathead minnow -<br>Pimephales promelas                 | 32 days  |
| ethylene oxide             | Acute LC50 490000 μg/l Marine water  | Crustaceans - Brine shrimp -<br>Artemia sp.                    | 48 hours |
|                            | Acute LC50 137000 μg/l Fresh water   | Daphnia - Water flea - Daphnia magna                           | 48 hours |
|                            | Acute LC50 84000 μg/l Fresh water    | Fish - Fathead minnow -<br>Pimephales promelas                 | 96 hours |

**Conclusion/Summary**: Not available.

#### 12.2 Persistence and degradability

**Conclusion/Summary**: Not available.

#### 12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF        | Potential |
|-------------------------|--------|------------|-----------|
| Diol                    | 0.58   | -          | low       |
| 1,4-dioxane             | -0.42  | 0.3 to 0.7 | low       |
| ethylene oxide          | -0.3   | -          | low       |

12.4 Mobility in soil

Soil/water partition : Not available.

coefficient (Koc)

Mobility : Not available.

#### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

## **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

#### **Product**

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** 

**Packaging** 

**Methods of disposal** 

: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered

: The classification of the product may meet the criteria for a hazardous waste.

when recycling is not feasible.

**Special precautions** 

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

|                                  | ADR/RID        | ADN            | IMDG           | IATA           |
|----------------------------------|----------------|----------------|----------------|----------------|
| 14.1 UN number                   | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name     | -              | -              | -              | -              |
| 14.3 Transport hazard class(es)  | -              | -              | -              | -              |
| 14.4 Packing group               | -              | -              | -              | -              |
| 14.5<br>Environmental<br>hazards | No.            | No.            | No.            | No.            |

14.6 Special precautions for user

: **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

: Not available.

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>UK (GB)/REACH</u>

Annex XIV - List of substances subject to authorization

**Annex XIV** 

None of the components are listed.

Substances of very high concern

None of the components are listed.

## **SECTION 15: Regulatory information**

#### Ozone depleting substances

Not listed.

#### **Prior Informed Consent (PIC)**

Not listed.

#### **Persistent Organic Pollutants**

Not listed.

Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and

articles

#### **Seveso Directive**

This product is controlled under the Seveso Directive.

#### **Danger criteria**

| Category |  |
|----------|--|
| E2       |  |

#### **National regulations**

| Product/ingredient name | List name | Name on list                   | Classification | Notes |
|-------------------------|-----------|--------------------------------|----------------|-------|
| ,                       | ' '       | ethylene oxide;<br>epoxyethane | Carc.          | -     |

#### **EU regulations**

Industrial emissions (integrated pollution prevention and control) - : Not listed

Air

Industrial emissions (integrated pollution prevention and control) - : Not listed

prever

#### **International regulations**

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### **Montreal Protocol**

Not listed.

#### **Stockholm Convention on Persistent Organic Pollutants**

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

#### **Inventory list**

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

**Eurasian Economic Union**: Russian Federation inventory: Not determined.

Japan : Japan inventory (CSCL): Not determined.
Japan inventory (ISHL): Not determined.

## **SECTION 15: Regulatory information**

**New Zealand** : Not determined. Not determined. **Philippines** Republic of Korea : Not determined. **Taiwan** : Not determined. : Not determined. **Thailand Turkey** : Not determined. : Not determined. **United States Viet Nam** : Not determined.

15.2 Chemical Safety : This product contains substances for which Chemical Safety Assessments are still

Assessment required.

#### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

#### Procedure used to derive the classification

| Classification   | Justification  |  |
|--|--|--|
| Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411 | Calculation method Calculation method Calculation method |  |

### Full text of abbreviated H statements

| H220   | Extremely flammable gas.  |
|--------|---|
| H225   | Highly flammable liquid and vapor.                              |
| H280   | Contains gas under pressure; may explode if heated.             |
| H301   | Toxic if swallowed.   |
| H302   | Harmful if swallowed.   |
| H314   | Causes severe skin burns and eye damage.                        |
| H315   | Causes skin irritation.   |
| H318   | Causes serious eye damage.                                      |
| H319   | Causes serious eye irritation.                                  |
| H331   | Toxic if inhaled.   |
| H335   | May cause respiratory irritation.                               |
| H336   | May cause drowsiness or dizziness.                              |
| H340   | May cause genetic defects.                                      |
| H350   | May cause cancer.   |
| H351   | Suspected of causing cancer.                                    |
| H360Fd | May damage fertility. Suspected of damaging the unborn child.   |
| H372   | Causes damage to organs through prolonged or repeated exposure. |
| H411   | Toxic to aquatic life with long lasting effects.                |
| H412   | Harmful to aquatic life with long lasting effects.              |
| EUH019 | May form explosive peroxides.                                   |
| EUH066 | Repeated exposure may cause skin dryness or cracking.           |

#### Full text of classifications

#### **SECTION 16: Other information**

Acute Tox. 3 ACUTE TOXICITY - Category 3
Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Chronic 2 AQUATIC HAZARD (LONG-TERM) - Category 2 Aquatic Chronic 3 AQUATIC HAZARD (LONG-TERM) - Category 3

Carc. 1B CARCINOGENICITY - Category 1B Carc. 2 CARCINOGENICITY - Category 2

Eye Dam. 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Flam. Gas 1A FLAMMABLE GASES - Category 1A Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2

Muta. 1B GERM CELL MUTAGENICITY - Category 1B
Press. Gas (Comp.) GASES UNDER PRESSURE - Compressed gas
Repr. 1B TOXIC TO REPRODUCTION - Category 1B
Skin Corr. 1 SKIN CORROSION/IRRITATION - Category 1
Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2

STOT RE 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

Date of printing : 1/4/2023 Date of issue/ Date of : 1/4/2023

revision

Date of previous issue : No previous validation

Version : 1

#### **Notice to reader**

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.