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

1.1 Product identifier

Trade name: ECOS Orange Plus Concentrate
Description / Product Code: 9702
Registration number: Substances contained in the mixture have already (pre)-registered by the suppliers.
1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.
Application of the substance / the mixture:
Cleaning Product
Surface cleaner
1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier:
Venus Labs/dba Earth Friendly Products
111. S Rohlwing Rd Addison, IL 60101

Phone: 800-451-9304
Chemtrec: 800-424-9300
1.4 Emergency telephone number:

Emergency telephone number: 112

## SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation EC No 1272/2008 CLP:
GHS05 corrosion

Eye Dam. $1 \cdots$ H318 Cáuses serious eye damage.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

### 2.2 Label elements

Labelling according to Regulation EC No 1272/2008 CLP:
The product is classified and labelled according to the CLP regulation.
Hazard pictograms:


GHS05

Signal word: Danger
Hazard-determining components of labelling:
D-Glucopyranose, oligomers, decyl octyl glycosides

Trade name: ECOS Orange Plus Concentrate

## Hazard statements:

H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

## Precautionary statements

P102 Keep out of reach of children.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## Additional information:

National Poisoning Centre
EUH208 Contains Limonene, Citrus spp.. May produce an allergic reaction.

| Regulation (EC) No 648/2004 on detergents / Labelling for contents |  |
| :--- | :--- |
| non-ionic surfactants | $\geq 5-<15 \%$ |
| anionic surfactants | $<5 \%$ |
| preservation agents (PHENOXYETHANOL, POTASSIUM SORBATE), perfumes (Limonene) |  |
| 2 2.3 Other hazards |  |
| Results of PBT and vPvB assessment |  |
| PBT: Not applicable. |  |
| vPvB: Not applicable. |  |

## SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.
Ingredients according Regulation (EU) 830/2015:

| $\begin{aligned} & \text { CAS: } 68515-73-1 \\ & \text { NLP: 500-220-1 } \end{aligned}$ | D-Glucopyranose, oligomers, decyl octyl glycosides | $2.5-<10 \%$ |
| :---: | :---: | :---: |
|  | $\Leftrightarrow$ Eye Dam. 1, H318 |  |
| CAS: 64-17-5 <br> EINECS: 200-578-6 <br> Index number: 603-002-00-5 | ethanol | $0.1-\leq 2.5 \%$ |
|  | (®) Flam. Liq. 2, H225 |  |
| CAS: 122-99-6 <br> EINECS: 204-589-7 <br> Index number: 603-098-00-9 | 2-Phenoxyethanol | $0.1-\leq 2.5 \%$ |
|  | <! Acute Tox. 4, H302; Eye Irrit. 2, H319 |  |
| CAS: 5989-27-5 <br> EINECS: 227-813-5 <br> Index number: 601-029-00-7 | Limonene | 0.1-<0.25\% |
|  | (A) Flam. Liq. 3, H226; < 5 Aquatic Acute 1, H400; Aquatic Chronic 1, H410; 〈1〉 Skin Irrit. 2, H315; Skin Sens. 1, H317 |  |
| CAS: 94266-47-4 EC number: 304-454-3 | Citrus spp. | 0.1-<0.25\% |
|  | Flam. Liq. 3, H226; * Aquatic Acute 1, H400; Aquatic Chronic 1, H410; \! Skin Irrit. 2, H315; Skin Sens. 1, H317 |  |

Trade name: ECOS Orange Plus Concentrate

## SECTION 4: First aid measures

4.1 Description of first aid measures

General information:
Take affected persons out into the fresh air.
Seek immediate medical advice.

## After inhalation:

Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
Seek medical treatment in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact:
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.
Get medical attention if irritation occurs.
Avoid strong water jet-risk of cornea damage, consult a doctor.
After swallowing:
Drink plenty of water and provide fresh air. Call for a doctor immediately.
Seek immediate medical advice.
Never give anything by mouth to an unconscious person.
4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray.
5.2 Special hazards arising from the substance or mixture No further relevant information available.
5.3 Advice for firefighters

Protective equipment:
Self contained breathing apparatus and full protective clothing must be worn in case of fire.
Additional information Collect contaminated fire fighting water separately. It must not enter the sewage system.

## SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.
Wear protective clothing.
6.1.2 For emergency responders Wear protective equipment. Keep unprotected persons away.
6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust, silica gel).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Send for recovery or disposal in suitable receptacles.
6.4 Reference to other sections:

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

Trade name: ECOS Orange Plus Concentrate

See Section 13 for disposal information.

## SECTION 7: Handling and storage

7.1 Precautions for safe handling Open and handle receptacle with care.

Information about fire - and explosion protection: No special measures required.
7.2 Conditions for safe storage, including any incompatibilities

Storage: Store in cool, dry conditions in well sealed receptacles.
Requirements to be met by storerooms and receptacles: Store in a cool location.
Information about storage in one common storage facility: Not required.
Further information about storage conditions:
Keep container tightly sealed.
Store under lock and key and with access restricted to technical experts or their assistants only.
Store under lock and key and out of the reach of children.
7.3 Specific end use(s) No further relevant information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

## Ingredients with limit values that require monitoring at the workplace:

64-17-5 ethanol
WEL (Great Britain) Long-term value: $1920 \mathrm{mg} / \mathrm{m}^{3}, 1000 \mathrm{ppm}$
DNELs
Ethanol cas number: 64-17-5
Workers long-term exposure systemic effects via inhalation route: $950 \mathrm{mg} / \mathrm{m}^{3}$
Workers acute/short term exposure local effects: $1900 \mathrm{mg} / \mathrm{m}^{3}$
Workers systemic effects long-term exposure via dermal route: $343 \mathrm{mg} / \mathrm{kg}$ bw/day
General Population systemic effects long-term exposure via inhalation route : $114 \mathrm{mg} / \mathrm{m}^{3}$
General Population local effects acute/short term exposure via inhalation route : $950 \mathrm{mg} / \mathrm{m}^{3}$
General Population systemic effects long term exposure via dermal route : $206 \mathrm{mg} / \mathrm{kg}$ bw/day
General Population systemic effects long term exposure via oral route : $87 \mathrm{mg} / \mathrm{kg}$ bw/day

## PNECs

Ethanol cas number: 64-17-5
Freshwater : $0.96 \mathrm{mg} / \mathrm{l}$
Marine water : $0.79 \mathrm{mg} / \mathrm{l}$
Intermittent releases : $2.75 \mathrm{mg} / \mathrm{l}$
STP : $580 \mathrm{mg} / \mathrm{l}$
Sediment (freshwater) : $3.6 \mathrm{mg} / \mathrm{kg}$ sediment dw
Sediment (marine water) : 2.9
Soil : $0.63 \mathrm{mg} / \mathrm{kg}$ soil dw
DNEL Workers Long term exposure local effcts
Ethanol (CAS 64-17-5)
Inhlation: $1900 \mathrm{mg} / \mathrm{m}^{3}$
DNEL Workers Long term exposure systemic effects
Ethanol (CAS 64-17-5)
Inhalation: $950 \mathrm{mg} / \mathrm{m}^{3}$
Skin Contact: $343 \mathrm{mg} / \mathrm{kg}$ bw/day

Trade name: ECOS Orange Plus Concentrate

DNEL consumers Acute/short term exposure Local effects
Ethanol (CAS 64-17-5)
Inhalation : $950 \mathrm{mg} / \mathrm{m}^{3}$
DNEL Consumers Long-term exposure systemic effects
Ethanol (CAS 64-17-5)
Inhalation: $114 \mathrm{mg} / \mathrm{m}^{3}$
Skin Contact: $206 \mathrm{mg} / \mathrm{kg}$ bw/day

### 8.2 Exposure controls

## Personal protective equipment

General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Respiratory protection: Not required.
Protection of hands:


Protective gloves

## Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to $50 \%$ of the penetration time, is recommended.
Eye protection:


Tightly sealed goggles

Body protection:

Protective work clothing

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

## General Information

Appearance:

Form:
Colour:
Odour:
Odour threshold:
pH value:
Melting point/freezing point:

Liquid
Not determined
Characteristic
Not determined
4.00-5.10

Not determined

## Safety Data Sheet

complying with Regulation 1907/2006/EC (REACH Regulation), EU 2015/830 and Regulation No 1272/2008/EC (CLP)

Trade name: ECOS Orange Plus Concentrate

Initial boiling point and boiling range: Not determined
Flash point: Not Flammable
Flammability (solid, gas): Not applicable

Auto-ignition temperature: Not determined
Decomposition temperature: Not determined
Auto-ignition temperature: Product is not selfigniting.
Explosive properties: Product does not present an explosion hazard.
Explosion limits:

Lower:
Upper:
Oxidising propertie
Vapour pressure:
Density:
Relative density
Vapour density
Evaporation rate
Solubility in / Miscibility with water:

Not Flammable
Not applicable

Not determined
Not determined
Not considered as oxidising.
Not determined
Not determined
Not determined
Not determined
Not determined

Fully miscible

Partition coefficient: n-octanol/water: Not determined
Viscosity:
Dynamic: Not determined
Kinematic: Not determined
9.2 Other information No further relevant information available.

## SECTION 10: Stability and reactivity

10.1 Reactivity Stable under normal conditions
10.2 Chemical stability Material is stable under normal conditions.

Thermal decomposition / conditions to be avoided Stable at environment temperature.
10.3 Possibility of hazardous reactions No dangerous reactions known.
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials No further relevant information available.
10.6 Hazardous decomposition products No dangerous decomposition products known.

## SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Trade name: ECOS Orange Plus Concentrate

|  |  |  | (Contd. of page 6) |
| :---: | :---: | :---: | :---: |
| LD/LC50 values relevant for classification: |  |  |  |
| ATE (Acute Toxicity Estimates) |  |  |  |
| Oral | LD50 | $63636 \mathrm{mg} / \mathrm{kg}$ (rat) |  |
| 64-17-5 ethanol |  |  |  |
| Oral | LD50 | $7060 \mathrm{mg} / \mathrm{kg}$ (rat) |  |
| Inhalative | LC50/4 h (vapour) | $20000 \mathrm{mg} / \mathrm{l}$ (rat) |  |
| 122-99-6 2-Phenoxyethanol |  |  |  |
| Oral | LD50 | $1260 \mathrm{mg} / \mathrm{kg}$ (rat) |  |
| Dermal | LD50 | $5000 \mathrm{mg} / \mathrm{kg}$ (rabbit) |  |
| 5989-27-5 Limonene |  |  |  |
| Oral | LD50 | $4400 \mathrm{mg} / \mathrm{kg}$ (rat) |  |
| Skin corrosion/irritation Based on available data, the classification criteria are not met. Serious eye damage/irritation |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Respiratory or skin sensitisation Based on available data, the classification criteria are not met. |  |  |  |
| CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) |  |  |  |
| Germ cell mutagenicity Based on available data, the classification criteria are not met. |  |  |  |
| Carcinogenicity Based on available data, the classification criteria are not met. |  |  |  |
| Reproductive toxicity Based on available data, the classification criteria are not met. |  |  |  |
| STOT-single exposure Based on available data, the classification criteria are not met. |  |  |  |
| STOT-repeated exposure Based on available data, the classification criteria are not met. |  |  |  |
| Aspiration hazard Based on available data, the classification criteria are not met. |  |  |  |

## SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:
Ethanol, cas: 64-17-5
Fish toxicity LC50:> $10000 \mathrm{mg} / \mathrm{l}$
Daphnia toxicity, CEE0:> $7800 \mathrm{mg} / \mathrm{l}$
Bacterial toxicity (Ps putida) CEE0:> $6500 \mathrm{mg} / \mathrm{l}$
Algal toxicity (SC. Quadricauda), CEE0:> $5000 \mathrm{mg} / \mathrm{l}$
Algal toxicity (M. Acruginosa), CEE0:> $1450 \mathrm{mg} / \mathrm{l}$
12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.

Ecotoxical effects:
Remark: Harmful to fish
Additional ecological information:

## General notes:

Must not reach sewage water or drainage ditch undiluted or unneutralised.
The product contains materials that are harmful to the environment.
Harmful to aquatic organisms
12.5 Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

## Safety Data Sheet

Trade name: ECOS Orange Plus Concentrate
12.6 Other adverse effects No further relevant information available.

## SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation


Dispose according to National Regulations.


Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact manufacturer for recycling information.
Uncleaned packaging:
Recommendation:
Disposal must be made according to official regulations.
Packaging may be reused or recycled after cleaning.

## SECTION 14: Transport information

### 14.1 UN-Number

ADR, ADN, IMDG, IATA Void
14.2 UN proper shipping name ADR, ADN, IMDG, IATA Void
14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA Class

Void
14.4 Packing group

ADR, IMDG, IATA
Void
14.5 Environmental hazards:

Marine pollutant: No
14.6 Special precautions for user Not applicable.
14.7 Transport in bulk according to Annex II of

Marpol and the IBC Code
Not applicable.
UN "Model Regulation":
Void

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH Regulation 1907/2006/EC
Regulation (EU) 2015/830
CLP Regulation 1272/2008/EC
Constituents of the mixture that fall within the scope of REACH Regulation 1907/2006/EC, have been (pre)registered.
Directive $98 / 24 /$ EC on the protection of health and safety of workers from the risks related to chemicals agents at work.

Trade name: ECOS Orange Plus Concentrate
(Contd. of page 8)
Council Directive 94/33/EC on the protection of young people at work, as ammended.
Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding, as ammended

## Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

## National regulations:

Other regulations, limitations and prohibitive regulations
Substances of very high concern (SVHC) according to REACH, Article 57
It doesn't contain substances of very high concern (SVHC).
15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

## Relevant phrases

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

## Training hints

Suitable training on safety in handling, storing and converting the product should be given to the employees based on all the existing information.

[^0]
## Safety Data Sheet

Trade name: ECOS Orange Plus Concentrate

LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids - Category 2
Flam. Liq. 3: Flammable liquids - Category 3
Acute Tox. 4: Acute toxicity - Category 4
Skin Irrit. 2: Skin corrosion/irritation - Category 2
Eye Dam. 1: Serious eye damage/eye irritation - Category 1
Eye Irrit. 2: Serious eye damage/eye irritation - Category 2
Skin Sens. 1: Skin sensitisation - Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3


[^0]:    Abbreviations and acronyms:
    ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
    IMDG: International Maritime Code for Dangerous Goods
    IATA: International Air Transport Association
    GHS: Globally Harmonised System of Classification and Labelling of Chemicals
    EINECS: European Inventory of Existing Commercial Chemical Substances
    ELINCS: European List of Notified Chemical Substances
    CAS: Chemical Abstracts Service (division of the American Chemical Society)
    DNEL: Derived No-Effect Level (REACH)
    PNEC: Predicted No-Effect Concentration (REACH)
    LC50: Lethal concentration, 50 percent

