SAFETY DATA SHEET Envirobead (Apple)

According to Regulation (EC) No 1907/2006 (REACH), Annex II, as amended.

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

1.1. Product identifier

Product name Envirobead (Apple)

Product number PL.604/100

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

Identified uses Autoclave deodorant to be used when autoclaving laboratory waste

(one capsule per autoclave).

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Pro-Lab Diagnostics

3 Bassendale Road

Wirral Merseyside CH62 3QL

Tel: 0151 353 1613 Fax: 0151 353 1614 mowen@pro-lab.com

1.4. Emergency telephone number

Emergency telephone +44 (0)151 353 1613 Monday to Friday 9.00 to 17.00

+44 (0)7714 429 646 outside the above hours

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Aquatic Chronic 3, H412.

2.2. Label elements

Hazard statements H334 May cause allergy or asthma symptoms or breathing

difficulties if inhaled.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements Prevention:

P273 Avoid release to the environment.

Disposal:

P501 Dispose of contents/container to ...

Administrative information: EUH208 Contains 2.4- dimethylcyclohex-3-ene-1-

carbaldehyde.

May provoke an allergic reaction.

2.3. Other hazards

None.

SECTION 3: Composition/information on ingredients

3.1 Substances

n/a

3.2. Mixtures

Identification	(EC) 1272/2008	Note	Concentration (%)
2-tert-butylcyclohexyl acetate CAS: 88-41-5 EC: 201-828-7	Aquatic Chronic 2, H411		≥ 10 - < 20
2,6-dimethyl-7-octen- 2-ol CAS: 18479-58-8 EC: n/a	Skin Irrit. 2; H315 Eye Irrit. 2; H319		≥ 3 - < 5
hexyl acetate CAS: 142-92-7 EC: 205-572-7	Flam. Liq. 3; H226		<u>></u> 2.5 - < 5
cis-hex-3-en-1-ol CAS: 928-96-1 EC: 213-192-8	Flam. Liq. 3; H226 Eye Irrit. 2; H319		<u>></u> 1 - < 3

Identification	(EC) 1272/2008	Note	Concentration (%)
4-undecanolide CAS: 104-67-6 EC: 203-225-4	Aquatic Chronic 3; H412		≥ 0,1 - < 0,25
2-propenyl hexanoate (allyl hexanoate) CAS: 123-68-2 EC: n/a	Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 Aquatic Acute 1; H400 Aquatic Chronic 3; H412		≥ 0,1 - < 0,25
2,4-dimethylcyclohex- 3-ene-1- carbaldehyde CAS: 60638-04-2 EC: n/a	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1B; H317 Aquatic Chronic 3; H412		≥ 0,1 - < 0,25

Substance with exposure limit in the workplace

isopentyl acetate CAS: 123-92-2 EC: 204-662-3	Flam. Liq. 3; H226	<u>≥</u> 1-<5

For the full text of H-Statements mentioned in this Section, see Section 16.

Sensitising components Skin Sens. 1; H317 (0.1 - <1%):

Identification	CAS No.	EINECS No.
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	68039-49-6	268-264-1

Hydrocarbons: 0%

SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor. Do not leave the victim unattended.

4.1. Description of first aid measures

In the event of splashes or contact with eyes:

Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.

In the event of splashes or contact with skin:

Remove immediately contaminated clothing and shoes. In case of skin contact, rinse well with water.

In the event of swallowing:

Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, consult a doctor.

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

No data available.

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

No data available.

SECTION 5: Firefighting measures

Non-flammable.

5.1. Extinguishing media

Suitable extinguishing media Use sprayed water or water mist, foam, multi-purpose ABC powder,

BC powder, Carbon Dioxide (CO2).

Unsuitable extinguishing

Media

Water jet.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke. In the event of a fire, the following may be formed: carbon monoxide (CO) carbon dioxide (CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus for fire fighting if necessary.

Further information: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed in Sections 7 and 8.

For non-first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent product from entering drains. In case of contamination of rivers and lakes or drains inform the competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention:

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid skin and eye contact with this mixture.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

Incompatibilities

No data available.

7.3. Specific end use(s)

Revision date: 07/08/2018

No data available.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Components	CAS No.	Values	Parameters control	Updated	Base
Isopentyl acetate	123-92-2	TWA	50 ppm 270 mg/m ³	2000-06-16	2000/39/EC
		STEL	100 ppm 540 mg/m ³	2000-06-16	2000/39/EC

8.2. Exposure controls

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):







Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes .

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation. Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended:

Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

PVA (Polyvinyl alcohol) Recommended properties: Impervious gloves in accordance with standard EN374

Body protection

Avoid skin contact.

Wear suitable protective clothing. Suitable type of protective clothing:

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state: liquid Form: liquid Colour: Green

Taste: not determined

Odour: apple

Odour Threshold: not applicable

Flash point: 85 °C Method: Grabner Miniflash closed cup

Lower explosion limit: not determined not determined Upper explosion limit: Flammability (solid, gas): not applicable Oxidizing properties: no data available not determined Auto-ignition temperature: Decomposition Temperature: no data available pH: not determined Melting point: not determined Boiling point: not determined Vapour Pressure: not determined Density: not determined Bulk density: not applicable Water solubility: not determined Solubility/qualitative: practically insoluble Partition coefficient n-octanol / water: not applicable no data available Viscosity, kinematic: Relative vapor density: no data available Evaporation rate: no data available no data available Explosive properties:

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7. Stockage: 1 year secure from air and light and heat.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Avoid temperatures close to flash point (see paragraph 9). Avoid direct sources of heat.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Thermal decomposition may release/form: carbon monoxide (CO) carbon dioxide (CO2)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation, which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage.

May cause an allergic reaction by skin contact.

Acute oral toxicity:

Estimation of acute toxicity Dose: > 2000 mg / kg

Method: Calculation method

Acute toxicity by dermal contact:

Estimated acute dermal toxicity

Dose: > 2000 mg / kg

Method: Calculation method

11.1.1 Acute toxicity – Substances

Acute oral toxicity

2-tert-butylcyclohexyl acetate LD50: 4600 mg / kg (CAS: 88-41-5) Species: Rat

2.6-dimethyl-7-octen-2-ol LD50: 3600 mg/kg (CAS: 18479-58-8) Species: Rat

hexyl acetate LD50: > 5000 mg/kg

(CAS: 142-92-7) Species: Rat

4-undecanolide LD50: 18500 mg/kg

(CAS: 104-67-6) Species: Rat

2-propenyl hexanoate (allyl hexanoate) LD50: 218 mg/kg (CAS: 123-68-2) Species: Rat

Isopentyl acetate LD50: > 5000 mg/kg

(CAS: 123-92-2) Species: Rat

cis-hex-3-en-1-ol LD50: no data available.

2-propenyl hexanoate (allyl : hexanoate) LD50: no data available.

2,4-dimethylcyclohex-3-ene- : 1-carbaldehyde LD50: no data available.

acetate d'isopentyle LD50: no data available.

Acute dermal toxicity

2-tert-butylcyclohexyl acetate LD50: > 5000 mg/kg (CAS: 88-41-5) Species: Rabbit

- 2.6-dimethyl-7-octen-2-ol LD50: no data available

(CAS: 18479-58-8)

hexyl acetate LD50: > 5000 mg/kg (CAS: 142-92-7) Species: Rabbit

4-undecanolide LD50: no data available

(CAS: 104-67-6)

- 2-propenyl hexanoate (allyl hexanoate) LD50: no data available

(CAS: 123-68-2)

Isopentyl acetate LD50: no data available

(CAS: 123-92-2)

cis-hex-3-en-1-ol LD50: > 5000 mg/kg

Species: Rabbit

2-propenyl hexanoate (allyl: hexanoate) LD50: 300 mg/kg

Species: Rabbit

2,4-dimethylcyclohex-3-ene-: 1-carbaldehyde LD50: 5000 mg/kg

Species:

acetate d'isopentyle LD50: > 5000 mg/kg

Species: Rabbit

11.1.2 Mixture

Acute toxicity (other: routes of administration): no data available.

Corrosion: Skin / irritation: no data available.

Skin corrosion: Skin irritation: no data available.

Serious eye damage: no data available.

Respiratory or skin sensitization: no data available.

Cell mutagenicity: no data available.

Carcinogenicity: no data available.

Reproductive toxicity: no data available.

Systemic toxic target organ - single exposure: no data available.

Systemic toxic target organ - repeated exposure: no data available.

Aspiration hazard: no data available.

Phototoxicity: no data available.

Additional information: no data available.

SECTION 12: Ecological Information

12.1. Toxicity

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Contains no ingredients considered persistent, bio-accumulative and toxic (PBT) or very persistent and very bio accumulative (vPvB) at levels of 0.1% or more.

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of handling or unprofessional disposal.

SECTION 13: Disposal considerations

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: Transport information

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

SECTION 15: Regulatory information

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

- Container information:

No data available.

- Particular provisions :

No data available.

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704):

Labelling: Health=2, Inflammability=2, Instability/Reactivity=1, Specific Risk=none.



15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Abbreviations:

TWA STEL LD50

PBT: Persistent, bio accumulative and toxic. vPvB: Very persistent, very bio accumulative.

ADR: European agreement concerning the international carriage of dangerous goods by Road.

RID: Regulations concerning the International carriage of Dangerous goods by rail.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

Revision date 07/08/2018

Revision 6

Supersedes date 15/11/2017

SDS number SD833

Hazard statements in full:

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic by inhalation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H400 Very toxic to aquatic organisms.

H411 Toxic to aquatic adverse effects long term.

H412 Harmful to aquatic adverse effects long term.

EUH208 Contains < name of sensitising substance>

The information in this safety data sheet was obtained from current and reliable sources. However, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Pro-Lab Diagnostics' control, it is the user's responsibility to perform thorough testing of this product when used in combination with any other product. It is suggested that users familiarise themselves with this safety data sheet before handling the product.