

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

1.1. Product identifier

Product form : Mixture
Product name : BIOSHIELD LEMON
Product code : 205
Type of product : Detergent
Product group : Mixture

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

Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Cleaning/washing agents and additives

1.3. Details of the supplier of the safety data sheet

Manufacturer

Christeyns Professional Hygiene UK Ltd
Clover House
Macclesfield Road
SK23 7DQ Whaley Bridge, Derbyshire
United Kingdom
T 01663 733114, F 01663 733115
info.cph.uk@christeyns.com, www.christeyns-ph.co.uk

Supplier

Christeyns NV
Afrikalaan 182
9000 GENT
Belgium
T +32 (0)9/ 223 38 71, F +32 (0)9/ 233 03 44
info@christeyns.be, www.christeyns.com

1.4. Emergency telephone number

| Country/Area | Organisation/Company | Address | Emergency number | Comment |
|----------------|--|--|--|--------------------------------------|
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH | 0344 892 0111 | Only for healthcare professionals |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 1 H318
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger

Contains :

Alcohol ethoxylated; Alcohol ethoxylate; L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid

Hazard statements (CLP) :

H315 - Causes skin irritation.
H318 - Causes serious eye damage.

Precautionary statements (CLP) :

P102 - Keep out of reach of children.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves, eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P332+P313 - If skin irritation occurs: Get medical advice/attention.

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P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.

EUH-statements

: EUH208 - Contains AMYL CINNAMAL. May produce an allergic reaction.

2.3. Other hazards

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|--|---------|--|
| Alcohol ethoxylated | CAS-no: 69011-36-5 EC-No.: 931-138-8 REACH-no: Exempted | 5 – 10 | Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Dam. 1, H318 |
| Alcohol ethoxylate | CAS-no: 160901-19-9 EC-No.: 500-457-0 REACH-no: Exempted | 1 – 3 | Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412 |
| L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid | CAS-no: 79-33-4 EC-No.: 201-196-2 EC Index-No.: 607-743-00-5 REACH-no: 01-2119474164-39 | 1 – 3 | Skin Corr. 1C, H314 Eye Dam. 1, H318 EUH071 |
| AMYL CINNAMAL | CAS-no: 122-40-7 EC-No.: 204-541-5 | 0.1 – 1 | Skin Sens. 1, H317 Aquatic Chronic 2, H411 |

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation

: Allow affected person to breathe fresh air. Allow the victim to rest.

Skin contact

: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion

: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Acute effects skin

: Slight irritation. Red skin.

Acute effects eyes

: Causes serious eye damage. redness, itching, tears.

Acute effects oral route

: May cause irritation to the digestive tract. Abdominal pain, nausea.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

: Use extinguishing media appropriate for surrounding fire. Water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire

: Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Firefighting instructions

: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting

: Do not enter fire area without proper protective equipment, including respiratory protection.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible products : Strong bases.

Packaging materials : polyethylene.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure that there is a suitable ventilation system.

Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Chemical goggles or safety glasses. Wear eye protection

Skin protection

Protective equipment:

Wear suitable protective clothing

Hand protection:

Wear protective gloves. Wear protective gloves

Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | : Liquid |
| Colour | : Yellow. |
| Physical state/form | : Liquid. |
| Odour | : Lemon. |
| Odour threshold | : Not available |
| Melting point/range | : 0 °C |
| Freezing point | : Not determined as it is not relevant for the characterization of the product |
| Boiling point/Boiling range | : 100 °C |
| Flammability | : Non flammable. |
| Lower explosion limit | : Constituents do not contain chemical groups associated with explosivity |
| Upper explosion limit | : Constituents do not contain chemical groups associated with explosivity |
| Flash point | : Not determined as it is not relevant for the characterization of the product |
| Autoignition temperature | : Determination of the auto-ignition temperature is only relevant for pyrophoric liquids, however the mixture is not a pyrophoric liquid so the test is not required. |
| Decomposition temperature | : Only applies to self-reactive substances and mixtures, organic peroxides, and other substances and mixtures that may decompose. |
| pH | : 2 – 2.8 |
| Viscosity, kinematic | : Not available |
| Viscosity, dynamic | : 30 – 70 cP at 20 °C |
| Solubility | : Soluble in water. |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : Not available |
| Relative density | : 1.007 g/cm³ |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

| | |
|-----------------------------|------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

| AMYL CINNAMAL (122-40-7) | |
|--------------------------|--|
| LD50 oral rat | 3730 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:., 95% CL: 3190 - 4370 |
| LD50 oral | 3730 mg/kg bodyweight |
| LD50 dermal rat | > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other: |
| LD50 dermal | > 2000 mg/kg bodyweight |

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| Alcohol ethoxylated (69011-36-5) | |
|----------------------------------|----------------------|
| LD50 oral rat | > 300 (≤ 2000) mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |

| L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid (79-33-4) | |
|---|---|
| LD50 oral | 3730 mg/kg bodyweight |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OPP 81-2 (Acute Dermal Toxicity) |
| LD50 dermal | > 2000 mg/kg bodyweight |
| LC50 Inhalation - Rat | > 7.94 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity) |
| LC50 Inhalation - Rat (Dust/Mist) | > 7940 mg/l |

Skin corrosion/irritation : Causes skin irritation.

pH: 2 – 2.8

Additional information : Based on available data, the classification criteria are not met

| AMYL CINNAMAL (122-40-7) | |
|--------------------------|---|
| pH | 4.53 Temp.: 26,8 °C Concentration: 1 vol% Remarks on result: 'other:' |

| Alcohol ethoxylated (69011-36-5) | |
|----------------------------------|-------|
| pH | 5 – 7 |

Serious eye damage/irritation : Causes serious eye damage.

pH: 2 – 2.8

| AMYL CINNAMAL (122-40-7) | |
|--------------------------|---|
| pH | 4.53 Temp.: 26,8 °C Concentration: 1 vol% Remarks on result: 'other:' |

| Alcohol ethoxylated (69011-36-5) | |
|----------------------------------|-------|
| pH | 5 – 7 |

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

| Alcohol ethoxylated (69011-36-5) | |
|----------------------------------|------------------------|
| NOAEL (oral, rat) | > 250 mg/kg bodyweight |

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

11.2. Information on other hazards

Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

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| AMYL CINNAMAL (122-40-7) | |
|---|---|
| LC50 - Fish [1] | 0.91 mg/l Test organisms (species): not specified |
| EC50 - Crustacea [1] | 0.28 mg/l Test organisms (species): Daphnia sp. |
| EC50 - Other aquatic organisms [1] | 1.1 mg/l waterflea |
| EC50 - Other aquatic organisms [2] | 1.89 mg/l |
| EC50 72h - Algae [1] | > 1.5 mg/l Test organisms (species): not specified |
| EC50 72h - Algae [2] | 2.3 mg/l Test organisms (species): not specified |
| NOEC (chronic) | 0.041 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| Alcohol ethoxylated (69011-36-5) | |
| LC50 - Fish [1] | > 1 mg/l |
| EC50 - Crustacea [1] | > 1 mg/l |
| ErC50 algae | 1 – 10 mg/l |
| Alcohol ethoxylate (160901-19-9) | |
| LC50 - Fish [1] | 0.1 – 1 mg/l (Danio rerio - OESO 203 - ECHA) |
| EC50 - Crustacea [1] | 0.1 – 1 mg/l (Daphnia magna - ECHA) |
| ErC50 algae | 0.1 – 1 mg/l |
| NOEC chronic fish | > 0.1 mg/l |
| NOEC chronic algae | 0.14 mg/l (CESIO) |
| L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid (79-33-4) | |
| LC50 - Fish [1] | 195 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) |
| EC50 - Crustacea [1] | 130 mg/l Daphnia magna (Water flea) |
| EC50 - Other aquatic organisms [1] | 130 mg/l waterflea |
| EC50 - Other aquatic organisms [2] | > 2800 mg/l |
| 12.2. Persistence and degradability | |
| BIOSHIELD LEMON | |
| Persistence and degradability | Biodegradable. The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. |
| Alcohol ethoxylated (69011-36-5) | |
| Persistence and degradability | Readily biodegradable, according to appropriate OECD test, Not established. |
| Alcohol ethoxylate (160901-19-9) | |
| Persistence and degradability | Readily biodegradable. |
| L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid (79-33-4) | |
| Persistence and degradability | Rapidly degradable |
| 12.3. Bioaccumulative potential | |
| BIOSHIELD LEMON | |
| Bioaccumulative potential | No bioaccumulation. |
| AMYL CINNAMAL (122-40-7) | |
| Log Pow | 4.7 |
| Alcohol ethoxylated (69011-36-5) | |
| Partition coefficient n-octanol/water (Log Kow) | 4.73 |
| Bioaccumulative potential | No bioaccumulation. Not established. |

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| Alcohol ethoxylate (160901-19-9) | |
|--|--|
| Log Pow | 5.15 |
| Partition coefficient n-octanol/water (Log Kow) | 5.15 |
| Bioaccumulative potential | No bioaccumulation. |
| L-(+)-lactic acid; (2S)-2-hydroxypropanoic acid (79-33-4) | |
| Log Pow | -0.62 |
| 12.4. Mobility in soil | |
| AMYL CINNAMAL (122-40-7) | |
| Mobility in soil | 1233 Source: EPI Suite |
| 12.5. Results of PBT and vPvB assessment | |
| BIOSHIELD LEMON | |
| This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII | |
| 12.6. Endocrine disrupting properties | |
| No additional information available | |
| 12.7. Other adverse effects | |
| BIOSHIELD LEMON | |
| Other information | Avoid release to the environment. |
| Alcohol ethoxylated (69011-36-5) | |
| Other information | No other effects known,Avoid release to the environment. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

Waste / unused products

: Avoid release to the environment.

HP Code

: HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

| ADR | IMDG | IATA |
|--|---------------|---------------|
| 14.1. UN number or ID number | | |
| Not regulated for transport | | |
| 14.2. UN proper shipping name | | |
| Not regulated | Not regulated | Not regulated |
| 14.3. Transport hazard class(es) | | |
| Not regulated | Not regulated | Not regulated |
| 14.4. Packing group | | |
| Not regulated | Not regulated | Not regulated |
| 14.5. Environmental hazards | | |
| Not regulated | Not regulated | Not regulated |
| No supplementary information available | | |

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

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14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Detergent Regulation (EC 648/2004)

| Labelling of contents | |
|------------------------------------|-------|
| Component | % |
| non-ionic surfactants | 5-15% |
| anionic surfactants | <5% |
| perfumes | |
| AMYL CINNAMAL | |
| (R)-p-mentha-1,8-diene; d-limonene | |
| LINALOOL | |

Fragrance allergens > 0.01%:

AMYL CINNAMAL

(R)-p-mentha-1,8-diene; d-limonene

LINALOOL

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

: None.

Full text of H- and EUH-statements:

| | |
|---------------------|-----------------------------------|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
|---------------------|-----------------------------------|

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Full text of H- and EUH-statements:

| | |
|-------------------|---|
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Skin Corr. 1C | Skin corrosion/irritation, Category 1, Sub-Category 1C |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH071 | Corrosive to the respiratory tract. |
| EUH208 | Contains AMYL CINNAMAL. May produce an allergic reaction. |

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| | | |
|---------------|------|--------------------|
| Skin Irrit. 2 | H315 | Calculation method |
| Eye Dam. 1 | H318 | Calculation method |

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.