Safety Data Sheet

In accordance with REACH Regulation EC No.1907/2006

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

1.1. Product identifier

Product name: Ginger Essential Oil

CAS number: 84696-15-1

EINECS number: 283-268-3

Other names: Ginger Oil

INCI name: Zingiber Officinale Root Oil

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

Industrial use: Washing and cleaning products.

Professional use: Washing and cleaning products; polishes and wax blends; cosmetics

Consumer use: Washing and cleaning products; polishes and wax blends; air care products; biocides; tobacco products; cosmetics.

1.3. Details of the supplier of the safety data sheet

Company name: Bath and Body Base Ltd
2A Laurel Way
Bishop Auckland
Co. Durham
DL14 7NF

Tel: 07493 064263

Email: technical@bathandbodybase.com

1.4. Emergency telephone number

Emergency tel: 07493 064263

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]:
Asp. Tox. 1 – H304
Skin Sens. 1 – H317
Eye Irrit. 2 – H319
Aquatic Chronic 2 – H411

2.2. Label elements

Label elements labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard statements:
H304: May be fatal if swallowed and enters airways
H317: May cause an allergic skin reaction
H319: Causes serious eye irritation
H411: Toxic to aquatic life with long lasting effects

Signal words: DANGER

Hazard pictograms:

GHS07 GHS09

Precautionary statements (prevention):	P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash hands thoroughly after handling. P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves/protective clothing/eye protection/face protection. P273: Avoid release to the environment
Precautionary statements (response):	P301+P316: IF SWALLOWED: Get emergency medical help immediately. P331: Do NOT induce vomiting. P302+P352: IF ON SKIN: wash with plenty of water. P333+P317: IF SKIN irritation or rash occurs: Get medical help P362+P364: Take off contaminated clothing and wash it before reuse. 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+P317: IF EYE irritation persists: Get medical help. P391: Collect spillage
Precautionary statements (storage):	P405: Store locked up
Precautionary statements (disposal):	P501: Dispose of contents/container in accordance with local/ regional/national/international regulations. Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

2.3. Other hazards

Other hazards:	All essential oils are highly concentrated so have strong aromas and colour that can stain. Ginger oil contains over 11% Hydrocarbons. Emergency treatment for those who accidently swallow oils in this category is to seek medical attention immediately and transport sitting in a half-upright position. Substance is not identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100 Substance does not meet the criteria for vPvB and PBT according to Regulation (EC) No 1907/2006, Annex XIII

Section 3: Composition/information on ingredients

3.1. Chemical identity of the substance

Chemical identity:	Zingiber officinale (Ginger) Root Ext.
Common names(s), synonym(s):	Ginger Oil

3.2. Substances

Mixture/Natural Complex Substance (NCS):	This is a natural complex substance (NCS). The substance has a natural variability in its composition. It is obtained by steam distillation of the dried rhizome of Zingiber officinale.
Chemical Identity of ingredients:	Major components of this natural complex substance are: 29 to 40% Zingiberene – CAS 495-60-3, EC 207-804-2: Asp. Tox. 1, H304; Skin Irrit.2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Chronic 2, H411

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6 to 27% ar-Curcumene – CAS: 4176-06-1: not classified
4 to 15% β -Bisabolene – CAS 495-61-4, EC 610-461-5: Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317
3 to 15% β -Sesquiphellandrene – CAS 20307-83-9, EC 866-551-1: Flam. Liq. 3, H226; Asp. Tox. 1, H304
2 to 11% α -Farnesene – CAS 502-61-4, EC 207-948-6: Asp. Tox. 1, H304
2 to 8% Camphene – CAS 79-92-5, EC 201-234-8: Flam. Sol. 2, H228; Eye Irrit. 2, H319; Aquatic Chronic 1, H410
1 to 6% Limonene – CAS 5989-27-5, EC 227-813-5: Flam. Liq 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
1 to 5% α -Pinene – CAS 80-56-8, EC 201-291-9: Flam. Liq. 3, H226; Acute Tox 4, H302; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Acute, H400; Aquatic Chronic 1, H410
tr to 4% β -Phellandrene – CAS 555-10-2, EC 209-081-9: Flam. Liq. 3, H226; Asp. Tox. 1, H304
tr to 3% 1,8-Cineole – CAS 470-82-6, EC 207-431-5: Flam. Liq. 3, H226; Skin Sens. 1B, H317
0 to 1.5% β -Pinene – CAS 127-91-3, EC 204-872-5: Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic, 1 H410
0 to 1% β-Myrcene – CAS 123-35-3, EC 204-622-5: Flam. Liquid 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 2, H411
0 to 0.5% para-Cymene – CAS 99-87-6, EC 202-796-7: Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 (Lung, Oral); Repr. 2, H361 (Treatment related); Aquatic Chronic 2, H411
0 to 0.1% Methyl Eugenol – CAS 93-15-2, EC 202-223-0: Acute Tox. 4, H302; Muta. 2, H341; Carc. 2, H351; Aquatic Acute 2, H401

Section 4: First aid measures

4.1. Description of first aid measures

General advice: Do not leave affected person unattended. Remove victim out of danger area. Remove contaminated clothing immediately.

Skin contact: Wash immediately with plenty of water and soap.

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

Swallowed: Rinse mouth. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Never give anything by mouth to an unconscious person.

Inhalation: Remove victim to fresh air.

Self-protection of First Aider: Use personal protective equipment as described in Section 8 if substance is present.

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

Most important symptoms and effects: The product is not classified as harmful to human health.

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

Immediate/special treatment: If skin irritation or rash occurs, get medical advice/attention.

Section 5: Fire-fighting measures

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5.1. Extinguishing media

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical powder or appropriate / alcohol-free foam.

Unsuitable extinguishing media: Full water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: May produce fumes of carbon monoxide and carbon dioxide, heavy smoke and soot.

5.3. Advice for fire-fighters

Advice for fire-fighters: Avoid inhalation of smoke and fumes. In case of insufficient ventilation, wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

5.4. Emergency action code

Emergency action code: 3[Y] (Foam + BA & Fire Kit)

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Avoid contact with skin, eyes and inhalation of vapours.

For emergency responders: As per non-emergency personnel. Wear an appropriate NIOSH/MSHA approved respirator if mist, vapour or aerosol is generated.

6.2. Environmental precautions

Environmental precautions: Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Clean up spillage promptly. Contain and collect spillage with non-combustible, inert absorbent material, (eg sand, earth, diatomaceous earth, vermiculite) and place in upright, suitable, closed containers for disposal according to local / national regulations (see Section 13). Pick up and arrange disposal without creating mist / aerosol / excessive vapours.

6.4. Reference to other sections

Reference to other sections: Take hazard and precautionary phrases (Section 2) and Sections 7, 8 and 13 into account.

Section 7: Handling and storage

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7.1. Precautions for safe handling

Protective measures: Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Take precautionary measures against static discharges. Use personal protection recommended in Section 8.

Advice on general occupational hygiene: Wear appropriate protective clothing. Do not eat, drink or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Storage: Keep container tightly closed in a cool, dry and well-ventilated place.

Packaging: Refer to Section 16 for safe packaging information.

Incompatibilities: Refer to Section 10.

7.3. Specific end use(s)

Recommendations: None specified (as per REACH dossier).

Section 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits: Not available.

Additional exposure limits under the conditions of use: Not available.

DNEL/DMEL and PNEC-Values: Not available.

8.2. Exposure controls

Engineering controls: It is recommended that facilities storing or utilising this material should be equipped with an eyewash facility and a safety shower. process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Handle and store in accordance with good industrial hygiene and safety practices. Wear appropriate PPE according to Directive 89/686/EEC.

PPE – General: Use personal protective equipment depending on concentration and amount of hazardous substance. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing and wash before reuse. Remove contaminated clothing and protective equipment before entering eating areas. Wash hands before breaks and at the end of work. Avoid contact with eyes and skin.

PPE – Eye/face: Use protection goggles according to EN 166.

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PPE – Skin:	Hand: Chemical-resistant, impervious gloves complying with an approved standard (EN374) should be worn if handling substance. The quality of the protective gloves resistant to chemicals and the breakthrough time must be chosen as a function of the specific working place concentration and quantity of hazardous substances and length of time of exposure. Other: Wear protective clothing according to that recommended by the risk assessment for the product's use.
PPE – Respiratory:	Respiratory protection may be required if excessive airborne contamination occurs.
Environmental exposure control:	Avoid discharge into the environment. Refer to additional information provided in Sections 6 and 7 regarding safe handling and storage to prevent exposure to individuals and/or to the environment. Refer to official regulations (local/government).

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Clear mobile liquid
Colour:	Pale yellow to brownish yellow
Odour:	Characteristic warm, lemony, woody aroma of ginger
Relative density (specific gravity):	@ 20°C: 0.868 to 0.885
Refractive index:	@ 20°C: 1.480 to 1.494
Optical rotation:	@ 20°C: -58° to -24°
Solubility:	water = 0.4mg/L
Boiling point:	@101 325 Pa: 229.7°C
Vapour pressure:	@ 20°C: 8.4kPa
Freezing point:	@101 325 Pa: study technically not feasible (REACH)
Flash point:	76°C (Pensky Martens Closed Cup method)
Flammability:	The study does not need to be conducted because the substance is a liquid that is known to be stable in contact with air and water at room temperature for prolonged periods of time (days) and it does not contain metals or metalloids; the classification procedure does not need to be applied.
Explosiveness:	The study does not need to be conducted because there are no chemical groups present in the molecule which are associated with explosive properties.
Auto-ignition temperature:	@101 325 Pa: 245°C
Kinematic viscosity:	No data available (REACH dossier).
Partition coefficient n-octanol/water (log value):	@25C:LogKow=6.9
Relative vapour density:	No studies available (REACH dossier).

9.2. Other information

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Information with regard to physical hazard classes:	Categories not relevant for the safe use of this substance.
Other safety characteristics:	Categories not relevant for the safe use of this substance.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity:	The substance is stable under normal storage and handling conditions.

10.2. Chemical stability

Chemical stability:	Product is stable at room temperature.

10.3. Possibility of hazardous reactions

Hazardous reactions:	No dangerous reactions expected if used according to specifications.

10.4. Conditions to avoid

Conditions to avoid:	Heat, flames and sparks

10.5. Incompatible materials

Materials to avoid:	Strong acids, Strong bases, Strong oxidizing agents.

10.6. Hazardous decomposition product

Haz. decomp. products:	Carbon monoxide, carbon dioxide.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity, oral:	GHS criteria not met. Sherman-Wistar rat – 14d LD50 > 5000 mg/kg bw
Acute toxicity, inhalation:	no studies available (REACH dossier)
Acute toxicity, dermal:	no studies available (REACH dossier)
Eye irritation*:*	No classification eye irritation / serious eye damage (OECD guideline 437) for REACH but listed H319 in ECHA C&L
Skin irritation*:*	No classification for skin irritation (OECD guideline 439) for REACH
Skin sensitivity:	Classified Skin. Sens. 1 (OECD Guideline 442C for REACH - reactivity class moderate)
Mutagenicity/carcinogenicity:	Not mutagenic (S. typhimurium, BFM Assay)
Fertility/reproduction:	No studies available (REACH dossier).
STOT-single exposure*:*	data lacking (ECHA C&L)

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STOT-repeated exposure: data lacking (ECHA C&L)

Aspiration hazard: Classified Asp. Tox. 1 – may cause lung damage if liquid enters airways (due to low viscosity of hydrocarbon content)

11.2. Information on other hazard classes which relates to endocrine disrupting properties

Other hazards: No information on other hazard classes specified.

Section 12: Ecological information

12.1. Toxicity

Fish: Classified Aquatic Chronic 2, H411. Toxic to aquatic life with long lasting effects no studies available (REACH dossier)

Algae: Selenastrum sp. - EC50 >66.94 mg/l (OECD 201:2006 corr. 2011)

Aquatic invertebrates: Daphnia magna – EC50 = 8.752 mg/l (OECD 202:2004)

Microorganisms: No studies available (REACH dossier).

Terrestrial arthropods: Drosophila melanogaster - 72hr mortality with 0.5% ginger oil = 88% female, 79% male (Xu et al 2007, Journal Appl. Ecol 18, 8)

12.2. Persistence and degradability

Persistence and degradability: Not readily biodegradable - 69% after 9 days

12.3. Bioaccumulative potential

Bioaccumulative potential: No studies available (REACH). LogKow = 6.9, which may suggest potential for bioaccumulation (substances with logKow >4.5 have a potential to bio-concentrate)

12.4. Mobility in soil

Mobility: No studies available (REACH dossier).

12.5. Results of PBT and vPvB assessment

PBT identification: The substance is not PBT and vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties: Ginger oil is not on the ED-list (https://edlists.org/the-ed-lists) of endocrine disruptors meaning that it is not a substance identified as an endocrine disruptor at EU level (List I), a substance under evaluation for endocrine disruption under an EU legislation (List II) nor a substance considered, by the evaluating National Authority, to have endocrine disrupting properties (List III)

12.7. Other adverse effects

Other adverse effects: No further information available (REACH dossier).

Section 13: Disposal considerations

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13.1. Waste treatment methods

Product/packaging disposal: If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

Waste treatment – relevant information: Hazardous waste according to waste regulation. State and local hazardous waste regulations should be consulted to ensure complete and accurate classification and appropriate treatment.

Sewage disposal – relevant information: Waste should not be disposed of by release to sewers.

13.2. Special precautions for landfill and incineration

Special precautions for landfill and incineration: Waste packaging is suitable for incineration.

Section 14: Transport information

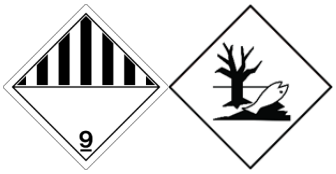
UN number: 3082

UN proper shipping name: Environmentally Hazardous Substance, Liquid, N. O. S.

Transport hazard class(es): 9

Packaging group: III

Transport labels:



Environmental hazards: See Section 2 - IMDG - Marine pollutant

Special precautions for user: Dangerous Goods Note
Tunnel Restriction code: 3 (E)

Maritime transport in bulk according to IMO instruments: UN3082 - EXTRACTS, LIQUID for flavour or aroma Class 3 (Flammable liquids); packing group III
Marine pollutant

Section 15: Regulatory information

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

Specific regulations: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)

15.2. Chemical Safety Assessment

Chemical safety assessment: Not relevant for this substance.

Section 16: Other information

16.1. Other information

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Packaging:

Type	Suitability
Glass	Yes
Steel	Yes
Aluminium	Yes
F/HDPE	Yes
Stainless steel drum	Yes

Shelf life: 48 months when stored within advised conditions, re-test every 12 months thereafter for a possible further 24 months.

Other information: * Indicates text in the SDS which has changed since the last revision.

Legal disclaimer: This information is provided for documentation purposes only.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product.

Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

Compliance with all appropriate local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing.

Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary.

All health and safety information contained in this document should be provided to your employees or customers.

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