SAFETY DATA SHEET (SDS)

Essential Oil: Ginger
SDS Created: 10 June 2026
Revision Date: 10 June 2029

CHAPTER 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

1.1 Globally Harmonized System (GHS) product identifier
Product name: Ginger - Organic
Latin name of botanical source: *Zingiber officinale*
INCI Name: Zingiber Officinale (Ginger) Root Oil

1.2 Other means of identification
Item number/size: 380 – Various sizes not to exceed 33.81 Fluid Ounces or 1 Liter.

1.3 Recommended use of the chemical and restrictions on use:
Aromatherapy, natural perfumery, as recommended. Do not ingest.

1.4. Supplier's details:
Company name: BIORUŽA s.r.o.
Company address: Laborecká 1, 01001 Žilina, Slovakia.,
Company contact: 00421 905 864 140
info@emerosa.sk
www.emerosa.sk

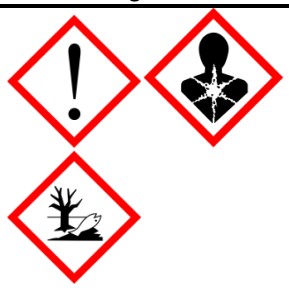
1.5. **Emergency telephone number:**

National Toxicology Information Center: Phone: 02/54774166

CHAPTER 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture
Flammable liquids, Category 4
Serious eye damage/eye irritation, Category 2
Skin Sensitization, Category 1
Aspiration Hazard, Category 1
Hazardous to aquatic environment Short term/Acute, Category 2
Hazardous to aquatic environment Long term/Chronic, Category 2
Hazardous to aquatic environment Long term/Chronic, Category 3

2.2 GHS label elements, including precautionary statements

Signal Word	Hazardous Statement	Precautionary Statement	Hazard Pictograms
Danger	H227 – Combustible Liquid. H319 – Causes serious eye irritation. H317 – May cause an allergic skin reaction. H304 – May be fatal if swallowed and enters airways. H401 – Toxic to aquatic life H411 – Toxic to aquatic life with long lasting effect.	P102 - Keep out of reach of children. P210 – Keep away from flames and hot surfaces. No smoking. P280 – Wear protective gloves/eye protection/face protection. P370 + P378 – In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction. P403 + P235 – Store in well-ventilated place. Keep cool. P501 – Dispose of contents/container to an approved waste disposal plant. P264 –Wash hands thoroughly after handling.	

	H412 – Harmful to aquatic life with long lasting effect.	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. P261 –Avoid breathing dust/fume/gas/mist/vapours/spray. P272 –Contaminated work clothing should not be allowed out of the workplace. P302 + P352 – IF ON SKIN: Wash with plenty of water/soap. P333 + P313 –If skin irritation or rash occurs: Get medical advice/attention. P362 + P364 –Take off contaminated clothing and wash before reuse. P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician. P331 – Do NOT induce vomiting. P405 – Store locked up. P273 – Avoid release to the environment.	

2.3 Other hazards that do not result in classification
May cause skin irritation/allergy. Patch test recommended.

CHAPTER 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Composition

Chemical Name (common name)	CAS# TSCA	EC (EINECS)#	ICSC #	RTECS#	EINECS#	UN#	% by weight
Ginger Oil	8007-08-7	N/A	N/A	N/A	N/A	3082	100 %
EU Allergens:							
Citral (Geranial + Neral)	5392-40-5	N/A	N/A	N/A	N/A	N/A	≤ 1.5%
Citronellol	106-22-9	N/A	N/A	N/A	N/A	N/A	≤ 0.5%
Geraniol	106-24-1	N/A	N/A	N/A	N/A	N/A	≤ 0.10%
Limonene	138-86-3	N/A	N/A	N/A	N/A	N/A	≤ 1.5%
Linalool	78-70-6	N/A	N/A	N/A	N/A	N/A	≤ 1%
Prop 65:							
Myrcene	123-35-3	N/A	N/A	N/A	N/A	N/A	≤ 1.0%

CHAPTER 4: FIRST-AID MEASURES

4.1 Description of necessary first-aid measures (of Substance)
Eye contact:
Check for and remove any contact lenses. Flush with water for 15 minutes. If symptoms persist get medical attention.
Skin Contact:
No harmful effect with normal skin. If skin irritation does occur, wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
Inhalation:
Not likely to occur under normal conditions of use. If symptoms occur, move to fresh air and obtain medical advice.
Ingestion:
Not an expected route of exposure. In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with milk or water and consult a doctor. Keep the exposed person at rest. Do NOT force vomiting unless directed to do so by medical personnel. Seek immediate medical attention and show the Substance's label to medical personnel.

4.2 Most important symptoms and effects, both acute and delayed (of Substance)
Eye contact:
May cause eye irritation and corneal damage if not immediately rinsed out.
Skin Contact:
Repeated contact may cause allergic dermatitis.
Inhalation:
Breathing high concentrations of vapor may cause anesthetic effects.
Ingestion:
Not an expected route of exposure.
4.3 Indication of any immediate medical attention and special treatment needed (of Substance)
None known.

CHAPTER 5: FIRE-FIGHTING MEASURES

5.1 Flash point
66˚C

5.2 Extinguishing media
Suitable extinguishing media: sprayed water or water mist, alcohol-resistant foam, multipurpose ABC powder, BC powder, carbon dioxide (CO2)
Unsuitable extinguishing media: water jet (straight stream).

5.3 Specific hazards arising from the chemical
None known.

5.4 Special protective actions for firefighters
Use self-contained breathing apparatus and protective clothing.

CHAPTER 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Stop leak if you can do so without risk. Consult safety measures listed under CHAPTERs 7 and 8.
For fire-fighters:
Fire-fighters will be equipped with suitable personal protective equipment (See CHAPTER 8). High temperature may increase the pressure inside thecontainer—cool the container by sprinkling water. Avoid breathing emitted vapors.

6.2 Environmental precautions
Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, or diatomaceous earth in drums for waste disposal. Avoid allowing product to reach sewage system or any waterways. Inform respective authorities in case of seepage into sewage system or waterways.

6.3 Methods and material for containment and cleaning up
Absorb spill with non-combustible matter (such as detergent--do not use solvents) and transfer to containers.

CHAPTER 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid unintentional contact with skin surfaces. Wear suitable protective clothing. Avoid inhalation. Ensure good ventilation or exhaust in workplace. Do not allow contact with eyes. Always wash hands after handling. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

7.2 Conditions for safe storage, including any incompatibilities
Store in closed glass containers, away from heat, light and other sources of ignition. Store in cool area.

CHAPTER 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters
OSHA TWA: None established
OSHA STEL: None established
ACGIH TWA: None established

ACGIH STEL: None established
NOHSC TWA: None established
NOHSC STEL: None established

8.2 Appropriate engineering controls
General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

8.3 Individual protection measures
Personal protective equipment:
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.
Eye/face protection:
Avoid contact with eyes. Use eye protectors (safety goggles in accordance with standard EN166) designed to protect against liquid splashes.
Hand protection:
Wear suitable protective gloves (resistant to chemical agents in accordance with standard EN374) in the event of prolonged or repeated skin contact.
Type of gloves recommended: Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR)) or PVA (Polyvinyl alcohol).
Body protection: 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.



CHAPTER 9: PHYSICAL CHEMICAL PROPERTIES

Physical state: Transparent liquid
Color: Light yellow to brownish
Odor: Warm, spicy, stimulating, hint of sweetness
Miscibility in water: Insoluble
Miscibility in alcohol: Not specified
Miscibility in essential oil: Not specified
Liposolubility: Not specified
pH: Not applicable
Boiling point/boiling range: 254°C
Flash Point: 66°C
Vapor pressure: Not specified
Evaporation rate: Not specified
Density: Not specified
Water solubility: Insoluble
Self-ignition temperature: Not specified
Decomposition point/decomposition range: Not specified
Refractive index @ 20˚C: 1.460 – 1.550
Partition coefficient: Not specified
Specific gravity @ 20 ˚C: 0.860 – 0.916

CHAPTER 10: STABILITY AND REACTIVITY

10.1 Reactivity
Not reactive.

10.2 Chemical stability
This substance is stable under the recommended handling and storage conditions in CHAPTER 7.

10.3 Possibility of hazardous reactions
When exposed to high temperatures, the substance may release hazardous decomposition products, such as carbon monoxide, carbon dioxide, fumes, and nitrogen oxide.

10.4. Conditions to avoid

None known.

10.5 Incompatible materials
Alkali metals, ammonia, oxidizing agents, peroxides strong inorganic acids.

10.6 Hazardous decomposition products
The thermal decomposition may release/form carbon monoxide (CO) and carbon dioxide (CO_2).

CHAPTER 11: TOXICOLOGICAL INFORMATION

11.1 Substance
Acute toxicity:
LD50 oral = 3100 mg/kg
Skin corrosion/irritation:
May be irritating to skin.
Serious eye damage/irritation:
May be irritating to eyes. Prompt rinsing and removal of the substance will avoid damage.
Respiratory sensitization:
Breathing high concentrations of vapor may cause anesthetic effects.
Germ cell mutagenicity:
Not specified
Carcinogenicity:
IARH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity:
Not specified
STOT-single exposure:
Not specified
STOT-related exposure:
Not specified
Aspiration hazard:
Not specified

11.2 Information on the likely routes of exposure
Skin/scalp contact.

11.3 Symptoms related to the physical, chemical, and toxicological characteristics
None known. Irritation of the eye if exposed. Redness of the skin if irritated.

11.4 Delayed and immediate effects and also chronic effects from short-term and long-term exposure
Exposure to vapors from this solvent 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.
Repeated or prolonged contact with the substance may cause removal of natural oil from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Splashes in the eyes may cause irritation and reversible damage.

11.6 Interactive effects
Not specified

11.7 Where specific chemical data are not available
Not specified

11.8 Substances
Not specified

11.9 Substances verses ingredient information
Not specified

11.10 Other Information
None

CHAPTER 12: ECOLOGICAL INFORMATION

Info summery of Ecological information
Balance of data on substance as a whole, not determined.

12.1 Eco toxicological properties of specific substances
See each category below for specific substances

12.2 Toxicity
Acute fish toxicity:
LC50 / 96 HOUR – No data available
Toxicity to aquatic plants – No data available
Toxicity to microorganisms – No data available
Toxicity threshold – No data available

12.3 Persistence and degradability
Biodegradation is expected

12.4 Bio-accumulative potential
Bioaccumulation is unlikely

12.5 Mobility in soil
Unknown

12.6 Other adverse effect
Avoid exposure to marine environments and waterways

CHAPTER 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Do not pour into drains or waterways. Observe all federal, state, and local environmental regulations. Member State-specific and Community-specific provisions must be considered. Considering the relevant known environmental and human health hazards of the materials, review and implement appropriate technical and procedural wastewater and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental release. This may include destructive techniques for waste and wastewater. In extreme situations, contact a licensed professional waste disposal service to dispose of this material.

Waste:
Proper waste management of the substance and/or its container must be determined in accordance with Directive 2008/98/EC. Do not pour into drains or waterways. 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.

Soiled packaging:
Empty all containers completely. Keep label(s) on every container. Give to a certified disposal contractor.

CHAPTER 14: TRANSPORT INFORMATION

14.1 UN Number
UN 3082

14.2 UN Proper shipping name
Environmentally hazardous substance, liquid, n.o.s.

14.3 Transportation hazard classes



Class 9

14.4 Packing group, if applicable

III

14.5 Environmental hazards



Environmentally hazardous material

14.6 Special precautions for user



Danger

14.7 Transport in bulk according to Annex II of MARPOL 73/78˚ and IBC Code

Not specified

14.8 Additional transport information

Not specified

CHAPTER 15: REGULATORY INFORMATION

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

Country	**Notification**
Canada	Not regulated
EU	See EU Allergens in CHAPTER 3
Hong Kong	Not regulated
Singapore	Not regulated
USA	**California Prop. 65 Components** This product contains chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.