SAFETY DATA SHEET (SDS)

Essential Oil: Verbena, Lemon
SDS Created: 13, June 2025
Revision Date: 13, June 2027

CHAPTER 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

1.1 Globally Harmonized System (GHS) product identifier
Product name: Verbena, Lemon - Organic
Latin name of botanical source: *Lippia citriodora*
INCI Name: Lippia Citriodora (Verbena) Oil

1.1 Recommended use of the chemical and restrictions on use:
Natural Perfumery, Cosmetics, Aromatherapy, as recommended.

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

1.4. Emergency advice:

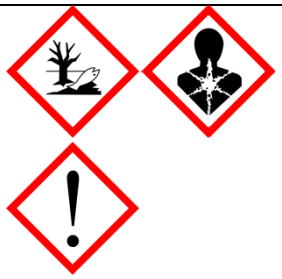
National Toxicology Information Center: Phone: 02/54774166

CHAPTER 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture
Flammable liquid, Category 4
Aspiration hazard, Category 1
Skin corrosion/irritation, Category 2
Skin sensitization, Category 1
Hazardous to the aquatic environment Long term/Chronic, Category 1

2.2 GHS label elements, including precautionary statements

Signal Word	Hazardous Statement	Precautionary Statement	Hazard Pictograms

Danger	H227 – Combustible liquid H304 – May be fatal if swallowed and enters airways H315 –Causes skin irritation. H317 – May cause allergic skin reaction. H410 – Very toxic to aquatic life with long lasting effects.	P102 - Keep out of the reach of children. P210 – Keep away from flames and hot surfaces. No smoking. P261 – Avoid breathing dust/fume/gas/mist/vapour/spray. P262 – Do not get in eyes, on skin, or on clothing. P272 – Contaminated work clothing should not be allowed out of the workplace. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection.	
		P301/P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor. P302/P352 – IF ON SKIN: Wash with plenty of water/soap. P331 – Do NOT induce vomiting. P333/P313 – If skin irritation or rash occurs: Get medical advice/attention. P362/P364 – Take off contaminated clothing and wash it before reuse. P391 – Collect spillage P403/P235 – Store in well-ventilated place. Keep cool. P405 – Store locked up. P501 – Dispose of contents/container in accordance with local/regional/national/international regulations. P101 – If medical advice is needed, have product container or label at hand.	

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#	EINECS#	ICSC #	RTECS#	UN#	EC#	% by weight
Verbena Oil	8024-12-2	85116-63-8	N/A	N/A	3082	285-515-0	100%
EU Allergens:							
Limonene	138-86-3	N/A	N/A	N/A	N/A	N/A	≤ 25.0%
Geraniol	106-24-1	N/A	N/A	N/A	N/A	N/A	0-2%
Citral	5392-40-5	N/A	N/A	N/A	N/A	N/A	≤ 20.0%
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%

SECTION 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.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Flash point
+69˚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.

SECTION 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 Sections 7 and 8.
For fire-fighters:
Fire-fighters will be equipped with suitable personal protective equipment (See Section 8). High temperature may increase the pressure inside the container—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.

SECTION 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.

SECTION 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.



SECTION 9: PHYSICAL CHEMICAL PROPERTIES

Physical state: Transparent liquid
Color: Light yellow to orange
Odor: Fresh, lemony
Miscibility in water: Insoluble
Miscibility in alcohol: Soluble in ethanol
Miscibility in essential oil: Soluble
Lipsolubility: Liposoluble
pH: Not applicable
Boiling point/boiling range: Not specified
Flash Point: +69°C
Vapor pressure: Not specified
Evaporation rate: Not specified
Density: 0.885 – 0.895
Water solubility: Insoluble
Self-ignition temperature: Not specified
Decomposition point/decomposition range: Not specified
Refractive index @ 20˚C: 1.475 – 1.495
Partition coefficient: Not specified
Specific gravity @ 20 ˚C: 0.886 – 0.895

SECTION 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 Section 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).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Substance
Acute toxicity:
Oral: LD50 (rat) > 5,000 mg/kg
Dermal: LD50 (rabbit) > 5,000 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
RTECS: N/A

SECTION 12: ECOLOGICAL INFORMATION

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

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

12.3 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

12.4 Persistence and degradability
Biodegradation is expected

12.5 Bio-accumulative potential
Bioaccumulation is unlikely
12.6 Mobility in soil
Unknown

12.7 Other adverse effect
Avoid exposure to marine environments and waterways

SECTION 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.

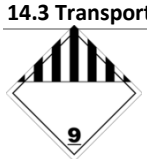
Soiled packaging:
Empty all containers completely. Keep label(s) on every container. Give to a certified disposal contractor.

SECTION 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



Toxic to aquatic life with long lasting effects.

14.6 Special precautions for user
Not specified

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

SECTION 15: REGULATORY INFORMATION

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

Country	Notification
EU	See EU Allergens in Section 3