SAFETY DATA SHEET (SDS)

Essential Oil: Tagetes
SDS Created: 1 July 2026
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SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

1.1 Globally Harmonized System (GHS) product identifier
Product name: Tagetes
Latin name of botanical source: *Tagetes minuta var. bipinata*
INCI Name: Tagetes Minuta (Tagetes) Flower Oil

1.2 Recommended use of the chemical and restrictions on use:
Aromatherapy, natural perfumery, cosmetica

1.2 Company name:
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

1.3 Emergency advice:

National Toxicology Information Center: Phone: 02/54774166

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture
Flammable liquids, Category 3
Aspiration Hazard, Category 1
Skin Corrosion/Irritation, Category 2
Respiratory sensitization, Category 1
Hazardous to aquatic environment Short term/Acute, Category 1
Hazardous to aquatic environment Long term/Chronic, Category 1

2.2 GHS label elements, including precautionary statements

Signal Word	Hazardous Statement	Precautionary Statement	Hazard Pictograms
Danger	H226 – Flammable liquid and vapour H304 – May be fatal if swallowed and enters airways H315 – Causes skin irritation H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	P102 - Keep out of reach of children. P210 – Keep away from flames and hot surfaces. No smoking. P233 – Keep container tightly closed. P240 – Ground/Bond container and receiving equipment. P241 – Use explosion-proof electrical/ventilating/lighting equipment. P242 – Use only non-sparking tools. P243 – Take precautionary measures against static discharge. P280 – Wear protective gloves/eye protection/face	

		protection. P303 + P361 + P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician. P331 – Do NOT induce vomiting. P405 – Store locked up. P264 –Wash hands thoroughly after handling. P280 – Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 – IF ON SKIN: Wash with plenty of water/soap. P332 + P313 – If skin irritation occurs: Get medical advice/attention. P362 + P364 – Take off contaminated clothing and wash it before reuse. P261 – Avoid breathing dust/fume/gas/mist/vapours/spray. P284 – [In case of inadequate ventilation] wear respiratory protection. P304 + P340 – IF INHALED: remove person to fresh air and keep comfortable for breathing. P342 + P311 – If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician. P273 – Avoid release to the environment. P391 – Collect spillage.	

2.3 Other hazards that do not result in classification

Known photosensitizer. Remove contaminated clothing, wash skin thoroughly with soap and water. Avoid exposure to sun if tagetes has been applied to skin in pure or diluted amounts.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Composition

Chemical Name (common name)	CAS# TSCA	CAS# EINECS	ICSC #	RTECS#	UN#	EINECS#	% by weight
Tagetes	8016-84-0	91770-75-1	N/A	N/A	1169	294-862-7	100 %
EU Allergens:							
Limonene	138-86-3	N/A	N/A	N/A	N/A		<6%
Linalool	78-70-6	N/A	N/A	N/A	N/A		<1%
Prop 65:							
Beta-Myrcene	123-35-3	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
60˚ 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: Reddish orange
Odor: Strong, warm, sweet-herbaceous, distinctive ketonic (pungent) aroma
Miscibility in water: Insoluble
Miscibility in alcohol: Soluble
Miscibility in essential oil: Soluble
Liposolubility: liposoluble
pH: Not specified
Boiling point/boiling range: Not specified
Flash Point: 60˚ 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: 1.479 – 1.503
Partition coefficient: Not specified
Specific gravity @ 20 ˚C: 0.850 – 0.889

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
Heat, open flame, sunlight.

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

10.6 Hazardous decomposition products
None – when carefully used.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Substance
Acute toxicity:
No data available.
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

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 1169

14.2 UN Proper shipping name
Extracts, aromatic, liquid
14.3 Transportation hazard classes



Class 3

14.4 Packing group, if applicable
III

14.5 Environmental hazards


Environmentally hazardous material

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**
Canada	Not regulated
EU	See EU Allergens in Section 3
Hong Kong	Not regulated
Singapore	Not regulated
USA	**California Prop. 65 Components** This contains chemicals known to the State of California to cause cancer, birth defects, and/or reproductive harm. See Section 3 for details.

SECTION 16: OTHER INFORMATION

Disclaimer:
The information in this Safety Data Sheet (SDS) is believed to be accurate as of the date issued. HOWEVER, NO WARRANTY, EXPRESSED OR IMPLIED IS MADE CONCERNING THE ACCURACY, COMPLETENESS OR RELIABILITY OF THE INFORMATION PROVIDED HEREIN, INCLUDING BUT NOT LIMITED TO, WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR COURSE OF PERFORMANCE. The information provided relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Since the conditions and methods of handling, storage, use and disposal of the product are beyond the control of BIORUŽA s.r.o. expressly disclaims any and all liability, loss or damage arising out of or relating to the use, storage, handling or disposal of the product or reliance on the information in this SDS. Users are cautioned to satisfy themselves as to the suitability of said information, procedures and recommendations for the purposes intended prior to use.