AROMOLOGY

MATERIAL SAFETY DATA SHEET (MSDS / SDS)

GINGERLILY CO2 EXTRACT

CAS Number: 93455-95-9
Botanical Name: *Hedychium spicatum*
Plant Part: Rhizome / Root

Issue Date: 30 June 2026
Version: 1.0

Prepared in accordance with ABNT NBR 14725:2023

SECTION 1: IDENTIFICATION

1.1 Product Identifier

Trade Name: Gingerlily CO2 Extract
Alternative Name: Gingerlily CO2 Oil / Hedychium spicatum Root Oil

1.2 Other Means of Identification

CAS Number: 93455-95-9
Botanical Name: *Hedychium spicatum*
Plant Part: Rhizome / Root

1.3 Recommended Uses and Restrictions on Use

Recommended Use: Perfumery raw material / fragrance ingredient.

Restrictions on Use: No additional information available.

1.4 Supplier Details

Aromology
G05 Al Ghazal Building
Nadd Al Hamar
Dubai, United Arab Emirates

Email: info@aromology.com
Website: www.aromology.com

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Substance or Mixture

According to GHS BR (ABNT NBR 14725:2023):

Flammable Liquids: Category 4
Skin Sensitisation: Category 1

Short-Term (Acute) Aquatic Hazard: Category 2
Long-Term (Chronic) Aquatic Hazard: Category 2

2.2 GHS Label Elements

Signal Word: Warning

Hazard Statements:
H227: Combustible liquid.
H317: May cause an allergic skin reaction.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements:
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261: Avoid breathing mist or vapours.
P280: Wear protective gloves, protective clothing and eye/face protection.
P302 + P352: IF ON SKIN: Wash with plenty of water.
P333 + P317: If skin irritation or rash occurs: Get medical help.
P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391: Collect spillage.

2.3 Other Hazards Which Do Not Result in Classification

Combustible liquid. Prevent uncontrolled release to the environment.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Chemical Identity: Gingerlily CO2 Extract
CAS Number: 93455-95-9
Botanical Identity: *Hedychium spicatum*
Chemical Characterisation: Natural CO2 extract / UVCB
Typical Molecular Weight: 220.00 g/mol
Naturalness: 100% natural

3.2 Mixtures

Not applicable. The product is a natural botanical extract.

SECTION 4: FIRST AID MEASURES

4.1 Description of Necessary First Aid Measures

Inhalation

Remove the affected person from the exposure site to fresh air and keep at rest. Obtain medical advice.

Skin Contact

Remove contaminated clothing. Wash thoroughly with water and soap. Contact a physician if symptoms persist.

Eye Contact

Flush immediately with water for at least 15 minutes. Contact a physician if symptoms persist.

Ingestion

Rinse the mouth with water and obtain medical advice. Do not give anything by mouth to an unconscious person.

4.2 Most Important Symptoms/Effects, Acute or Delayed

May cause an allergic skin reaction.

4.3 Immediate Medical Attention and Special Treatment Needed

Treat symptomatically. Where appropriate, use closed systems for transfer and processing and maintain areas where the material is openly handled under negative air pressure.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media:

- Dry chemical powder
- Carbon dioxide (CO2)
- Foam

Unsuitable extinguishing media: Do not use a direct water jet on burning material. Water may be ineffective.

5.2 Specific Hazards Arising from the Chemical

Combustion may generate carbon monoxide and unidentified organic compounds.

5.3 Special Protective Actions for Firefighters

Wear self-contained breathing apparatus where necessary. Follow standard procedures for chemical fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Avoid inhalation and contact with skin and eyes. A self-contained breathing apparatus is recommended in case of a major spill.

Remove all ignition sources and provide adequate ventilation.

6.2 Environmental Precautions

Keep away from drains, surface water, groundwater and soil.

6.3 Methods and Materials for Containment and Cleaning Up

Clean up spillage promptly. Contain gross spillages with sand or inert powder.

Collect recovered material in suitable closed containers and dispose of it in accordance with local regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid excessive inhalation of concentrated vapours. Follow good manufacturing practices for housekeeping and personal hygiene.

Wash exposed skin immediately after contact, before breaks and meals, and at the end of each work period. Clean contaminated clothing and shoes thoroughly before reuse.

Restrict open handling to properly trained employees. Keep heated processes at the lowest necessary temperature to minimise volatile emissions.

Keep away from ignition sources and naked flames.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Store upright in a tightly closed container in a cool, dry, ventilated area away from heat sources.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

Verify whether any constituents have applicable national occupational exposure limits.

8.2 Engineering Controls

Use closed systems where appropriate. Isolate mixing rooms and openly handled areas and maintain negative air pressure relative to the rest of the plant.

Provide local exhaust ventilation around open tanks, weighing and measuring areas, together with general dilution ventilation.

8.3 Personal Protective Measures

Eye / Face Protection

Use tight-fitting goggles, a face shield or safety glasses with side shields where eye contact may occur.

Hand Protection

Avoid skin contact. Use chemically resistant gloves.

Skin and Body Protection

Choose protective clothing appropriate to the concentration, quantity and workplace conditions.

Respiratory Protection

No respiratory protection is required during normal operations where adequate ventilation is sufficient. If controls are inadequate, use an approved, properly fitted respirator with organic-vapour cartridges or canisters and particulate filters.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical and Chemical Properties

Property	Specification
Physical State	Liquid / oil
Colour	Yellowish to pale orange-brown
Odour	Characteristic; conforms to standard
Flash Point	84°C
Vapour Pressure at 20°C	0.01 hPa - calculated
Flammability	Combustible liquid, Category 4
Reactivity with Water	No significant reactivity hazard
Extraction Method	Supercritical CO2 extraction

9.2 Data Relevant to Physical Hazard Classes

The product is classified as a Category 4 combustible liquid with a flash point of 84°C.

9.3 Other Safety Characteristics

Calculated vapour pressure: 0.01 hPa at 20°C.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity and Chemical Stability

Presents no significant reactivity hazard by itself or in contact with water. Stable under recommended handling and storage conditions.

10.2 Possibility of Hazardous Reactions

No hazardous reactions are expected under normal conditions.

10.3 Conditions to Avoid

Avoid direct sources of heat, sparks, flames and other ignition sources.

10.4 Incompatible Materials

Avoid contact with strong acids, alkalis and oxidising agents.

10.5 Hazardous Decomposition Products

Carbon monoxide and unidentified organic compounds may be formed during combustion.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute Toxicity - Oral

LD50 (rat): greater than 5,000 mg/kg.

Skin Sensitisation

Category 1. May cause an allergic skin reaction.

Likely Routes of Exposure

Inhalation of vapours or mist; skin and eye contact; ingestion.

Symptoms

Skin irritation or an allergic rash may occur in sensitised individuals.

11.2 Most Important Symptoms/Effects, Acute or Delayed

Allergic skin reaction. Seek medical assistance if irritation, rash or other symptoms persist.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Toxic to aquatic life with long lasting effects. Classified as acute aquatic hazard Category 2 and chronic aquatic hazard Category 2.

12.2 Persistence and Degradability

Readily biodegradable.

12.3 Bioaccumulative Potential

No significant bioaccumulation information is established.

12.4 Mobility in Soil

Prevent release to soil, drains, surface water and groundwater.

12.5 Other Adverse Effects

Collect spillage. Avoid uncontrolled environmental release.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Recommended Disposal Methods

Product

Disposal together with normal waste is not permitted. Special disposal is required in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken to an approved waste-handling facility for recycling or disposal.

Do not discharge into drains, waterways, groundwater or soil.

SECTION 14: TRANSPORT INFORMATION

14.1 Transport Classification

UN Number: UN 3082
UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (contains camphene)
Transport Hazard Class: 9
Packing Group: III

IATA

UN 3082, Environmentally hazardous substance, liquid, n.o.s. (contains camphene), Class 9, Packing Group III.

IMDG

UN 3082, Environmentally hazardous substance, liquid, n.o.s. (contains camphene), Class 9, Packing Group III.

Marine Pollutant: Yes (camphene).

Other Transport Information

Keep containers tightly closed, upright and protected from heat and physical damage during transport.

SECTION 15: REGULATORY INFORMATION

15.1 Specific Regulations

Prepared in accordance with the classification and communication structure of ABNT NBR 14725:2023 and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

HMIS Classification:
Health Hazard: 1
Flammability: 1

Physical Hazard: 0

Consult all applicable local regulations for handling, storage, transport and disposal.

SECTION 16: OTHER INFORMATION

16.1 Abbreviations

GHS - Globally Harmonized System of Classification and Labelling of Chemicals
SDS - Safety Data Sheet
MSDS - Material Safety Data Sheet
UN - United Nations
IMDG - International Maritime Dangerous Goods Code
IATA - International Air Transport Association
PPE - Personal Protective Equipment

DISCLAIMER

The information contained in this Safety Data Sheet is based on currently available product information and is intended to describe the product from a health, safety and environmental perspective.

It should not be construed as guaranteeing any specific product properties.

Users are responsible for ensuring that the product is handled, stored and used in accordance with applicable legislation and appropriate occupational safety practices.

SUPPLIER INFORMATION

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