SAFETY DATA SHEET (SDS)

Essential Oil: Galbanum
SDS Created: January 5 2023

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

1.1 Globally Harmonized System (GHS) product identifier
Product name: Galbanum essential oil
Latin name of botanical source: *Ferula galbaniflua* INCI name: Ferula Galbaniflua (Galbanum) Gum Extract

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

1.3 Supplier s details:
Company name: ALADAGH HERBAL PRODUCT
Company address: Iran , North Khorasan
Email address: hamidrezaramooz15@gmail.com

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture
Flammable Liquid,
Skin corrosion/irritation,
Serious eye damage/eye irritationAspiration hazard,
Skin sensitization
Hazardous to the aquatic environment - Chronic hazard,

2.2 GHS label elements, including precautionary statements

Safety Information

	Hazardous Statement	Precautionary Statement
Warning	H226 - Flammable liquid and vapour	P102 - Keep out of reach of children.
	H302 - Harmful if swallowed	P273 - Avoid release to the environment.
	H315 - Causes skin irritation	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
	H319 - Causes serious eye irritation	P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled	

	Hazardous Statement	Precautionary Statement
	H317 - May cause an allergic skin reaction	
	H335 - May cause respiratory irritation	
	H304 - May be fatal if swallowed and enters airways	
	H411 - Toxic to aquatic life with long-lasting effects	

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

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

COMMON NAME	Galbanum essential oil
LATIN NAME	Ferula galbaniflua
COUNTRY OF ORIGIN	Iran
CULTIVATION METHOD	Conventional
TYPE	Hydrodistillation
EXTRACTION METHOD	Modified Microwave Extraction, Modified Hydrodistillation
PLANT PART	Gum
USE	Aromatherapy, Natural Perfumery, Incense

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

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SPECIFICATIONS (Range)

PHYSICAL APPEARANCE	Transparent liquid	Conforms
COLOR	Colorless to pale white	Conforms

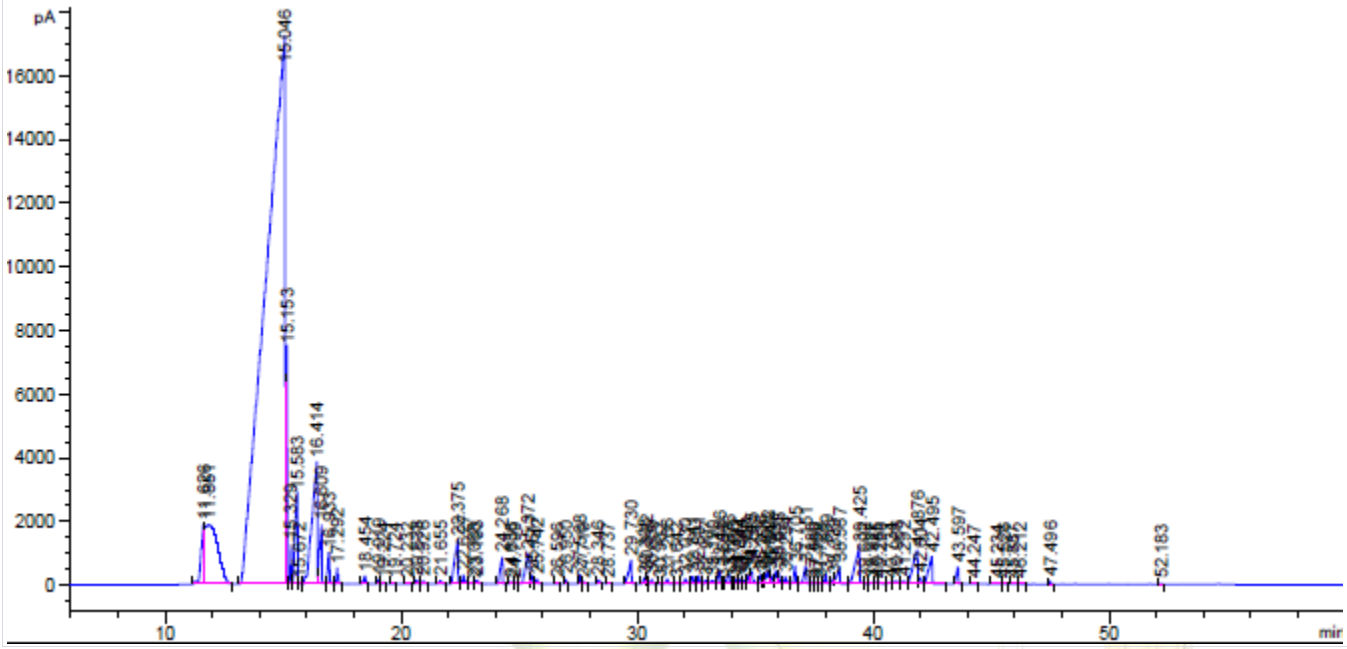
ODOR	Bittersweet green, leafy, earthy and bell-pepper-like.	Conforms
SOLUBILITY	Soluble in alcohol and fixed oils	Conforms

VOLATILE COMPONENTS:

COMPONENTS	Range %	%	COMPONENTS	Range %	%
ALPHA-PINENE	na	5.45	FENCHYL ACETATE	na	0.008
BETA-PINENE	0.65-0.78	71.5	GUAIOL	na	0.003
MYRCENE	na	2.78	EUDESMOL (ALPHA + BETA)	na	0.97
LIMONENE*	na	1	UNDECA-١,٣,٥-TRIENES (GALBANOLES)	na	0.117

COMMENTS

Odor quality is excellent.



SECTION 3: FIRST-AID MEASURES

3.1 Description of necessary first-aid measures (of Substance)
Eye contact:
Check for and remove any contact lenses. Immediately wash thoroughly with soft, clean water for 15 minutes while holding the eyelids open. Cold water may be used. If symptoms persist, seek 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 seek 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 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.

3.2 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:

Not an expected route of exposure.

Ingestion:

Not an expected route of exposure.

3.3 Indication of any immediate medical attention and special treatment needed (of Substance)

No data available.

SECTION 4: FIRE-FIGHTING MEASURES

4.1 Flash point (Celsius/Fahrenheit)

43° C

4.2 Extinguishing media

Keep packages near the fire cool, to prevent pressurized containers from bursting.

Suitable extinguishing media: sprayed water or water mist, alcohol-resistant foam, multipurpose ABC powder, BC powder, carbon dioxide (co_2)

Unsuitable extinguishing media: water jet (straight stream).

4.3 Specific hazards arising from the chemical

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. In the event of a fire, the following may be formed: carbon monoxide (CO) and carbon dioxide (CO_2).

4.4 Special protective actions for firefighters

Use self-contained breathing apparatus and protective clothing.

SECTION 5: HANDLING AND STORAGE

5.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Keep away from sources of ignition - No smoking. Avoid unintentional contact with skin surfaces. Wear suitable protective clothing. 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.

Fire prevention: Handle in well-ventilated areas. Vapors are heavier than air. They can spread along the ground and form mixtures that are explosive with air. Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits. Prevent the accumulation of electrostatic charges with connections to earth. Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected. Keep packages tightly closed and away from sources of heat, sparks and naked flames. Do not use tools which may produce sparks. Do not smoke.

5.2 Conditions for safe storage, including any incompatibilities

Store in tight glass, aluminum, or double-lined containers in a dark, cool, or refrigerated area away from direct heat. The floor must be

impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

SECTION 6: EXPOSURE CONTROL / PERSONAL PROTECTION

6.1 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

6.2 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.

6.3 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: Flame-retardant, antistatic protective clothing.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as back-up to engineering controls.

SECTION 7: PHYSICAL CHEMICAL PROPERTIES

Physical state: Transparent liquid
Color: Colorless to pale white
Odor: Bittersweet green, leafy, earthy and bell-pepper-like
Miscibility in water: Insoluble
Miscibility in alcohol: Soluble
Miscibility in essential oil: Soluble
Lipsolubility: Liposoluble
pH: Not specified
Boiling point/boiling range: Not specified
Flash Point: 43°C
Vapor pressure: Not specified
Evaporation rate: Not specified
Density: Not specified
Water solubility: Insoluble
Melting point/melting range: Not specified
Self-ignition temperature: Not specified
Decomposition point/decomposition range: Not specified

SECTION 8: STABILITY AND REACTIVITY

8.1 Reactivity
No data available

8.2 Chemical stability
This substance is stable under the recommended handling and storage conditions in Section 5.

8.3 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.

8.4. Conditions to avoid
Any apparatus likely to produce flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises. Avoid accumulation of electrostatic charges. Avoid heating, heat, flames, hot surfaces, humidity.

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

8.6 Hazardous decomposition products
The thermal decomposition may release/form carbon monoxide (CO) and carbon dioxide (CO^{Y}).

SECTION 9: TOXICOLOGICAL INFORMATION

9.1 Information on toxicological effects
Acute toxicity:
No data available
Skin corrosion/irritation:
May be irritating to skin
Serious eye damage/irritation:
Eye exposure to essential oils may irritate the eyes. Prompt rinsing and removal of the substance will avoid damage.
Respiratory or skin 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:
May be fatal if swallowed and enters airways. Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

9.1 Information on the likely routes of exposure
Skin/scalp contact

9.2 Symptoms related to the physical, chemical, and toxicological characteristics
None known. Irritation of the eye if exposed. Redness of the skin if acting as a photosensitizer.

9.3 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.

9.4 Interactive effects
Not specified

SECTION 10: ECOLOGICAL INFORMATION

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

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

10.3 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

10.4 Persistence and degradability
Biodegradation is expected
10.5 Bio-accumulative potential
Bioaccumulation is unlikely

10.5 Mobility in soil
Unknown

10.6 Other adverse effect
Avoid exposure to marine environments and waterways

SECTION 11: DISPOSAL CONSIDERATIONS

11.1 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 ٩٨/٢٠٠٨/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 12: TRANSPORT INFORMATION

12.1 UN Number
UN 1197

12.2 UN Proper shipping name
Extracts, liquid

12.3 Transportation hazard classes

Class 3

14.4 Environmental hazards


Hazardous to the aquatic environment

14.5 Special precautions for user
Not specified

15.6 Transport in bulk according to Annex II of MARPOL 78/73 and IBC Code
Not applicable