SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER

PRODUCT NAME: OREGANO OIL

BOTANICAL/CHEMICAL NAME: Origanum Vulgare

MOLECULAR WEIGHT: N/A
MOLECULAR FORMULA: N/A
CLP REFERENCE NUMBER N/A

REACH REGISTRATION NUMBER N/A **REACH PREREGISTRATION NUMBER** N/A

APPLICATION OF THE SUBSTANCE: Raw material: Fragrance/flavor

application CAS No (TSCA) 8007-11-2

EINEC 290-371-7 FEMA No 2828

FDA No 172.510, 182.200

2. HAZARDS IDENTIFICATION

Classification

Classification of the substance / preparation Classification according to Regulation (EC) No. 1272/2008 UN-GHS: FL 4, ATO 4(1000), ATD 3(300), AH 1, SCI 2, EDI 2A, SS 1, EH A3,C3 EU-CLP: ATO 4, ATD 3, AH 1, SCI 2, EDI 2, SS 1

Classification according to Directive 67/548/EEC or 1999/45/EC Xn; R21/22-38-43-52/53-65, S24-36/37-62

Label elements, including precautionary statements

Label Elements

Label elements according to Regulation (EC) No. 1272/2008



Label elements according to Directive 67/548/EEC or 1999/45/EC



Classification system:

The classification is according to the latest editions of EU lists, and extended by company and literature data.

Additional Information:

See section 16 for the wordings of listed R-, S-phrases, H-statements and Hazard codes.

Emergency Overview

Precautionary Statements – Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed in workplace
Keep away from heat/sparks/open flames/hot surfaces. –No smoking

Precautionary Statements - Response

Specific treatment (see ? on this label)

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF SWALLOWED: Immediately call POISON CENTER or doctor/physician

Do not induce vomiting

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Store in well-ventilated place. Keep cool

Precautionary Statements – Disposal

Dispose of contents/container to an approved disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Description:

Essential Oil; UVCB; Substance of biological origin with variable and partially unknown composition.

Hazard Impurities: Not Applicable

Content of R65 classified products: No

Dangerous components:

Carvacrol 80% to 85% UN-GHS: ATO 4(810), SCI 2, EDI 2A, SS 1

p-Cymene 4.4% UN-GHS: ATO 5 (4750); SCI 3, EH A2,C2 gamma-Terpinene 3.09% UN-GHS: ATO 5(3850), SCI 3

Terpinen-4-ol 0.6% UN-GHS: ATO 4(1300), ATD 5(2500), SCI 2, EDI 2A, EH A3

Myrcene 1.15% UN-GHS: EDI 2A, SCI 2

Thymol 0.1% to 0.8% UN-GHS: ATO 4(980); SCI 1C; EH A2,C2

Pinenes 0.53% UN-GHS: ATO 5(3700), SCI 2, SS 1

alpha-Terpinene 0.8% UN-GHS: ATO 4(1650), SCI 3, EH A2,C2 Linalool 0.19% UN-GHS: ATO 5(3000), EDI 2A, EH A3, SCI 2

4. FIRST AID MEASURES

First aid measures for different exposure routes

General Advice If symptoms persist, call a physician. Do not breathe

dust/fume/gas/mist/vapors/spray. Do not get in eyes, on

skin, or clothing

Eye contact Immediately flush with plenty of water. After initial

> flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

If symptoms persist, call a physician.

Skin contact Consult a physician if necessary. Wash off immediately

> with soap and plenty of water while removing all contaminated clothes and shoes. Remove and wash contaminated clothing before re-use. Wash off

immediately with plenty of water. If skin irritation persists, call a physician. Wash off immediately with soap and

plenty of water. Immediate medical attention is not

required.

Inhalation Move to fresh air. If breathing is irregular or stopped,

> administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Consult a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation

of vapors or decomposition products.

Ingestion Do not induce vomiting. Drink plenty of water. If

> symptoms persist, call a physician. Rinse mouth. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person.

Consult a physician.

Protection of first-aiders Use personal protective equipment

<u>Indication of immediate medical attention and special treatment needed, if</u> necessary

Notes to physician

May cause sensitization of susceptible persons. Treat symptomatically.

Symptoms of poisoning may even occur after several hours: therefore medical observation for at least 48 hours after accident

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use: Dry chemical. Carbon dioxide (CO₂). Alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from chemical

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Explosion Data

Sensitivity of Mechanical Impact None
Sensitivity to Static Discharge None

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes and clothing. Use

personal protective equipment. Remove all sources

of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharge.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements

or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from

entering drains.

Methods and materials for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Cover liquid spill with sand, earth or other

noncombustible absorbent material. Cover

powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up. Take precautionary measures against

static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes and clothing. Remove

and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Wear personal protective equipment. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and open flame. No smoking. Take necessary action to avoid static discharge (which might cause ignition

of organic vapors).

Conditions for safe handling

Technical measures/Storage

Conditions Keep container tightly closed in a dry and well-

ventilated place. Keep out of reach of children. Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep

away from heat.

Incompatible productsNone known based on information supplied.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control parameters

Exposure guidelines This product does not contain hazardous materials

with occupational exposure limits established by

the region specific regulatory bodies.

Exposure controls

Engineering measures Showers

Eye wash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting goggles. Face-shield

Skin and body protection Chemical resistant apron

Respiratory protection If exposure limits are exceeded for irritation is

experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with

current local regulations.

Hygiene measures When using, do not eat, drink or smoke. Provide

regular cleaning of equipment, work are and

clothing. Remove and wash contaminated clothing

before re-use.

Skin Protection







Body Protection



Safety Gloves

Tight safety goggles

Protective Clothing

Respiratory Protection



Dust Mask

Environmental exposure controls

Prevent entry into drains, ground/surface water or sewerage system

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties

Physical State @20°C Liquid

Appearance Yellow to dark brown

Odor Spicy, herbal, aromatic

Odor Threshold No information available

pH No information available

Optical Rotation -5.0 to +2.0

Melting point/range No information available

Freezing Point No information available

Initial boiling point No information available

Boiling point/boiling rangeNo information available

Flashpoint >61°C

Specific Gravity 0.930 – 0.955 @20°C

Refractive Index 1.500 – 1.516 @20°C

Evaporation Rate VALUE No information available

Flammable Properties No information available

Flammability limits in Air No information available

Explosive PropertiesNo information available

Oxidizing Properties No information available

Vapor Pressure @20°C No information available

Vapor Density No information available

Water Solubility Insoluble in water

Solubility Alcohol – 1:1(v/v)

Partition coefficient: No information available

Autoignition temperature No information available

Decomposition Temperature ºC No information available

Viscosity, dynamic No information available

Molecular Weight No information available

VOC ContentNo information available

10. STABILITY AND REACTIVITY

Reactivity

Not reactive, stable at room temperature

Chemical stability

Stable under recommended storage conditions

Possibility of hazardous reactions

Reactions with strong oxidizers

Conditions to avoid

Heat, flames and sparks

Incompatible materials

Avoid strong acids strong bases and all oxidizing agents

Hazardous decomposition products

No dangerous decomposition products expected by intended use

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product information Acute Oral toxicity LD50 orl-rat 1850mg/kg FCT

(1974) 12. 945

Acute Dermal toxicity LD50 skn-rbt 320mg/Kg FCT

(1974) 12,945

Inhalation Skin sensitization: Classified as hazard category 1

under GHS & CLP following EC 1272/2008.

Eye contact Classified as hazard category 2 under GHS & CLP

following EC 1272/2008

Skin contact Classified as hazard category 2 under GHS & CLP

following EC 1272/2008

Ingestion There is no data available for this product

Chemical name	LD50 Oral	LD50 Dermal	LG50 inhalation
Oregano Oil	Acute Oral toxicity LD50 orl-rat 1850mg/kg FCT (1974) 12. 945	Acute Dermal toxicity LD50 skn- rbt 320mg/Kg FCT (1974) 12,945	No Data available

<u>Information on toxicological effects</u>

Symptoms No information available

<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u>

Sensitization No information available

Mutagenic effects No information available

Carcinogenicity Carvacrol (major component) is

known to display anti-carcinogenic activity. Tisserand et al. report on the non-mutagenic and anti-induced mutagenicity effects of several high Carvacrol containing Origanum oils ref: Essential Oil Safety: A Guide for Health Care Professionals Tisserand R & Young R. Google e-Book 2013.

Not listed as carcinogen by IARC, NTP, EPA, Calif Prop 65 & TRI

Reproductive ToxicityNo information available

Specific target organ systemic toxicity (single exposure)

No information available

Specific target organ systemic toxicity (repeated exposure)

No information available

Chronic toxicity Repeated exposure may cause

allergic reactions in very susceptible persons. Avoid repeated exposure

Aspiration hazard Classed as hazard category 1 under

GHS & CLP following EC 1272/2008

CMR Effects

Carcinogen No information available

Mutagen No information available

Reprotoxic No information available

Exposure Limits

Note: There is a blanket recommendation of 10 mg/m3 for inspirable dusts or mists when limits have not otherwise been established

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT

Ecotoxicity

Classification according to the Regulation (EC) No 1272/2008: Hazardous to the aquatic environment — long-term hazard, category 3

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Oregano Oil	No data available	No data available	No data available

Persistence and degradability

No information available

Bioaccumulation

No information available

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste disposal methods Dispose of in accordance with local

regulations

Contaminated packaging Do not re-use empty containers

Recommednations:

Empty contaminated packing thoroughly as they may be recycled.

Moistened solids to be disposed of adhering to necessary technical regulations after consulting concerned authorities

14. TRANSPORTATION INFORMATION

IMDG/IMO

UN Number 2810

Proper shipping name TOXIC, LIQUIDS, ORGANIC nos (Origanum

oil)

Hazard Classification 3

Packaging Group III

Marine Pollutant Yes

ADR/IMDG/IATA Labels:



Special precautions for users:

Wear protective gloves/protective clothing/eye protection/face protection. Take off contaminated clothing and wash before re-use. Prevent entry into drains, ground/surface water or sewerage system.

15. REGULATORY INFORMATION

EU regulations

This product has been classified and marked in accordance with the EU Directives/Ordinance on Hazardous Materials.

Internal Inventories

TSCA Complies

DSL/NDSL Complies

EINECS/ELINCS Complies

ENCS Complies

IECSC Complies

KECL Complies

PICCS Complies

AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINICS/ELINCS – European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances IECSC

- China Inventory of Existing Chemical Substances KECL -

Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Sudden Release of Pressure Hazard No

Reactive Hazard No

Clean Water ACT

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under Comprehensive Environmental Response Compensation and

Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization ACT (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material.

California Proposition 65

This product does not contain any Proposition 65 Chemicals

16. OTHER INFORMATION

Relevant R – and S phrases

R21/22 HARMFUL IN CONTACT WITH SKIN AND IF SWALLOWED.

R38 IRRITATING TO SKIN.

R43 MAY CAUSE SENSITIZATION BY SKIN CONTACT.

R52/53 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG - TERM

ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

Relevant H-, P - Statements and Hazard Codes

H302 HARMFUL IF SWALLOWED

H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS

H311 TOXIC IN CONTACT WITH SKIN

H315 CAUSES SKIN IRRITATION

H317 MAY CAUSE AN ALLERGIC SKIN REACTION

H319 CAUSES SERIOUS EYE IRRITATION

OTHER INFORMATION:

Workplace Exposure Limits EH40. CHIP for everyone HSG 108

Revision Date 11/23/20

Revision Note No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of this publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet