

500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 1 of 11

Version # 04 Print Date: 02-16-2024

1. IDENTIFICATION

Product Description: CITRONELLYL ACETATE

CAS # 150-84-5 **FEMA Number** 2311

Other means of identification

Vigon Item # 500482

Recommended use Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance

compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.

Recommended restrictions For Manufacturing Use Only

<u>Company</u> <u>24 Hour Emergency Response Information</u>

Vigon International, LLC INFOTRAC (ACCT# 78928);

127 Airport Road 1-800-535-5053 WITHIN THE U.S.A.
E. Stroudsburg, PA 18301 1-352-323-3500 OUTSIDE THE U.S.A.

For information call: 570-476-6300

Web Site: www.vigon.com

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Vigon International, LLC Address 127 Airport Road

E. Stroudsburg, PA 18301

United States

Telephone For information call: 570-476-6300

Website www.vigon.com

E-mail regulatory@vigon.com

Emergency phone number INFOTRAC (ACCT# 78928);

1-800-535-5053 WITHIN THE U.S.A. 1-352-323-3500 OUTSIDE THE U.S.A.

2. HAZARD(S) IDENTIFICATION

Physical hazards Not classified.

Health hazardsSkin corrosion/irritationCategory 2Environmental hazardsHazardous to the aquatic environment, acuteCategory 2

hazard

Hazardous to the aquatic environment, Category 2

long-term hazard

Label elements



Signal word Warning



500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 2 of 11

Version # 04 Print Date: 02-16-2024

Hazard statementCauses skin irritation. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves.

Response IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse. Collect spillage.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information 100% of the substance consists of component(s) of unknown acute oral toxicity. 100% of the

substance consists of component(s) of unknown acute dermal toxicity. 100% of the substance

consists of component(s) of unknown acute inhalation toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Chemical name	Common name and synonyms	CAS number	%
CITRONELLYL ACETATE	3,7-dimethyl-6-octen-1-yl ethanoate	150-84-5	100
	citronellyl ethanoate		
	3,7- dimethyloct-6-enyl acetate		
	1-acetoxy-3,7-dimethyl oct-6-ene		

4. FIRST-AID MEASURES

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or

persist.

Skin contact Take off immediately all contaminated clothing. Get medical attention if irritation develops and

persists. Wash skin thoroughly with soap and water for several minutes.

Eye contact Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and

persists. Promptly wash eyes with plenty of water while lifting the eye lids.

Ingestion Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if

the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low

so that stomach vomit doesn't enter the lungs.

Most important

symptoms/effects, acute and

delayed

Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment

Not available.

needed

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves. Show this safety data sheet to the doctor in attendance.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

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



500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 3 of 11

Version # 04 Print Date: 02-16-2024

Specific hazards arising from

the chemical

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

Fire fighting

equipment/instructions

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.

Specific methods

General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials. Static charges generated by emptying package in or near flammable vapor may cause flash fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

Collect and dispose of spillage as indicated in section 13 of the SDS.

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Retain and dispose of contaminated wash water. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. HANDLING AND STORAGE

Precautions for safe handling

Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

This substance has no PEL, TLV, or other recommended exposure limit.



500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 4 of 11

Version # 04 Print Date: 02-16-2024

Biological limit values No biological exposure limits noted for the ingredient(s).

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Wear safety glasses with side shields (or

goggles). Face shield is recommended.

Skin protection

Hand protection Chemical resistant gloves.

Other Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material

and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Refer to Spec Sheet

Physical state Liquid.
Form Liquid.

Color Refer to Spec Sheet

Odor Characteristic.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling 444.2 °F (229 °C)

range

Flash point > 200.0 °F (> 93.3 °C) Closed Cup

Evaporation rate Not available.
Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 20 mbar at 121°C

0.05 mm Hg at 20 °C

Vapor density 6.9

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.



500482 CITRONELLYL ACETATE

Page 5 of 11 Revision Date: 02-16-2024

Print Date: 02-16-2024 Version # 04

Decomposition temperature Not available. Not available. Viscosity

Other information

0.89 g/cm3 estimated at 25 °C Density

Explosive properties Not explosive.

Flammability class Combustible IIIB estimated

Molecular weight 198.3 g/mol Oxidizing properties Not oxidizing. Specific gravity 0.89 at 25 °C

10. STABILITY AND REACTIVITY

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products if stored and handled as indicated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Knowledge about health hazard is incomplete.

Skin contact Causes skin irritation.

Eye contact Direct contact with eyes may cause temporary irritation. Causes mild eye irritation.

Ingestion Knowledge about health hazard is incomplete.

Symptoms related to the physical, chemical and toxicological characteristics Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not known.

Skin corrosion/irritation Causes skin irritation.

> Rabbit, Primary Skin Irritation - Irritating Human Maximization Test - Not a sensitizer

Species: rabbit Result: Irritant.

Method: OECD Guideline 404

Serious eye damage/eye

Direct contact with eyes may cause temporary irritation. irritation Rabbit, Eye Irritation - Nonirritating

Species: rabbit Result: non-irritant

Method: OECD Guideline 405



500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 6 of 11

Version # 04 Print Date: 02-16-2024

Respiratory or skin sensitization

Respiratory sensitizationDue to partial or complete lack of data the classification is not possible. **Skin sensitization**Due to partial or complete lack of data the classification is not possible.

Open epicutaneous test (OET)

Species: guinea pig Result: Non-sensitizing.

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible.

Carcinogenicity Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity -

single exposure

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity -

repeated exposure

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

12. ECOLOGICAL INFORMATION

Ecotoxicity Toxic to aquatic life with long lasting effects.

Hydrolysis

Test method: OECD Guideline 111 (abiotic)

pH4

Half-life: 4,101 h (20 °C)

Test method: OECD Guideline 111 (abiotic)

pH4

Half-life: 2,523 h (25 °C)

Test method: OECD Guideline 111 (abiotic)

pH7

Half-life: 8,191 h (20 °C)

Test method: OECD Guideline 111 (abiotic)

pH7

Half-life: 4,905 h (25 °C)

Test method: OECD Guideline 111 (abiotic)

рН9

Half-life: 337 h (20 °C)

Test method: OECD Guideline 111 (abiotic)

pH9

Half-life: 185 h (25 °C)



500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 7 of 11

Version # 04 Print Date: 02-16-2024

Product Species Test Results

CITRONELLYL ACETATE (CAS 150-84-5)

Other EC20 Micro-organisms > 1000 mg/l, 30 min

Aquatic

Fish LC50 Zebra danio (Danio rerio) 6.1 mg/l, 96 hours

Persistence and degradability Test method: OECD 301B; ISO 9439; 92/69/EEC, C.4-C (aerobic), activated sludge

Method of analysis: CO2 formation relative to the theoretical value

Degree of elimination: 80 - 90 % (28 d)

Evaluation: Readily biodegradable (according to OECD criteria).

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructionsDo not discharge into drains, water courses or onto the ground. Do not allow this material to drain

into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or

used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Local disposal regulationsDispose in accordance with all applicable regulations.

Hazardous waste code Not established.

Waste from residues / unused

products

Empty containers or liners may retain some product residues. This material and its container must

be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

ADN

UN number 3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRONELLYL ACETATE)

Transport hazard class(es) 9
Subsidiary class(es) Packing group III
Environmental hazards Yes
Labels required 9

ADR

UN number 3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRONELLYL ACETATE)

Transport hazard class(es) 9
Subsidiary class(es) Packing group III
Environmental hazards Yes
Labels required 9



500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 8 of 11

Version # 04 Print Date: 02-16-2024

RID

UN number 3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRONELLYL ACETATE)

Transport hazard class(es) 9
Subsidiary class(es) Packing Group III
Environmental Hazards Yes
Labels required 9

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT

BULK

UN number 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRONELLYL ACETATE)

Hazard class 9
Packing group III

Environmental hazards

Marine pollutantYesPackaging exceptions155Packaging bulk241Labels required9

DOT

NON-BULK

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

UN number 3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRONELLYL ACETATE)

Transport hazard class(es) 9
Subsidiary class(es) Packing group ||||

Environmental hazards

Marine pollutant Yes
Labels required 9

Transport in bulk according

to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

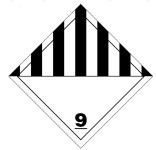


500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 9 of 11

Version # 04 Print Date: 02-16-2024

ADN; ADR; DOT BULK; IMDG; RID



Marine pollutant



15. REGULATORY INFORMATION

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard

. •

categories

Skin corrosion or irritation

SARA 313 (TRI reporting)

Not regulated.



500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 10 of 11

Version # 04 Print Date: 02-16-2024

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

 Issue date
 01-01-2015

 Revision date
 02-16-2024

Version # 04

HMIS® ratings Health: 2

Flammability: 1 Physical hazard: 0

List of abbreviations ACGIH: American Conference of Governmental Industrial Hygienists.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstract Service.

IARC: International Agency for Research on Cancer.

IATA: International Air Transport Association.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous

Chemicals in Bulk.

IMDG: International Maritime Dangerous Goods.

MARPOL: International Convention for the Prevention of Pollution from Ships. RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short term exposure limit. TWA: Time Weighted Average.



500482 CITRONELLYL ACETATE

Revision Date: 02-16-2024 Page 11 of 11

Version # 04 Print Date: 02-16-2024

Disclaimer

Vigon International, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Vigon International, Inc. has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing this product to assess its' safety in the final application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.