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Safety data sheet

BASF Safety data sheet
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Product: **Citronellyl Acetate**

(30035076/SDS_GEN_TH/EN)
Date of print: 19.10.2025

1. Substance/preparation and manufacturer/supplier identification

Product name:
Citronellyl Acetate

Use: Chemical, Chemical for detergents, Cosmetic and oral care chemical, flavoring substance

Manufacturer/supplier:
BASF (Thai) Limited
23rd Floor, Emporium Tower, 622, Sukhumvit 24 Rd.,
Klongton, Klongtoey, Bangkok 10110, THAILAND
Telephone: +66 2624-1999
Telefax number: +66 2664-9254
E-mail address: Thailand-SDS-info@basf.com

Emergency information:
International emergency number:
Telephone: +49 180 2273-112

2. Hazard identification

Classification according to UN GHS 2009

Classification of the substance and mixture:
Skin corrosion/irritation: Cat.2
Hazardous to the aquatic environment - acute: Cat.2
Hazardous to the aquatic environment - chronic: Cat.2

Label elements and precautionary statement:

Pictogram:

Signal Word:
Warning

Hazard Statement:

H315	Causes skin irritation.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves.
P273	Avoid release to the environment.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical attention.
P391	Collect spillage.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Other hazards which do not result in classification:
If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/information on ingredients

Chemical nature

Substance nature: Substance

citronellyl acetate
CAS Number: 150-84-5

Hazardous ingredients

citronellyl acetate

Content (W/W): >= 75 % - <= 100 %	Skin Corr./Irrit.: Cat. 2 Aquatic Acute: Cat. 2
CAS Number: 150-84-5	Aquatic Chronic: Cat. 2

geranylacetate

Content (W/W): > 0 % - < 1 %	Skin Corr./Irrit.: Cat. 2
CAS Number: 105-87-3	Skin Sens.: Cat. 1 Aquatic Acute: Cat. 2 Aquatic Chronic: Cat. 3

nerylacetate

Content (W/W): > 0 % - < 1 %	Skin Sens.: Cat. 1B
CAS Number: 141-12-8	Aquatic Acute: Cat. 2

3,7-Dimethyl-octen-6-ol-1

Content (W/W): > 0 % - < 0.1 %	Acute Tox.: Cat. 5 (oral)
CAS Number: 106-22-9	Acute Tox.: Cat. 5 (dermal)
	Skin Corr./Irrit.: Cat. 2
	Eye Dam./Irrit.: Cat. 2A
	Skin Sens.: Cat. 1B
	Aquatic Acute: Cat. 2

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Wash thoroughly with soap and water

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician:
Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:
carbon dioxide, dry powder, foam

Unsuitable extinguishing media for safety reasons:
water jet

Specific hazards:
carbon oxides, harmful vapours
The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Cool endangered containers with water-spray.

6. Accidental Release Measures

Personal precautions:
Ensure adequate ventilation.Avoid contact with the skin, eyes and clothing.Use personal protective clothing.Information regarding personal protective measures, see section 8.Do not breathe vapour/spray.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater.Inform authorities in the event of product spillage to water courses or sewage systems.

Methods for cleaning up or taking up:
For small amounts: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).
For large amounts: Dike spillage. Pump off product.
Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Handling

Ensure thorough ventilation of stores and work areas. Wear suitable protective clothing and eye/face protection. Avoid contact with the skin, eyes and clothing. Keep container tightly sealed. This product may cause irritations; wash your hands after every contact.

Protection against fire and explosion:
Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame.

Storage

Odour-sensitive: Segregate from products releasing odours.
Further information on storage conditions: Keep container tightly closed and dry; store in a cool place. Protect contents from the effects of light.

8. Exposure controls and personal protection

Components with occupational exposure limits

No substance specific occupational exposure limits known.

Personal protective equipment

Respiratory protection:
Suitable respiratory protection for higher concentrations or long-term effect: Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:
Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Avoid contact with the skin, eyes and clothing. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

9. Physical and Chemical Properties

Form:	liquid	
Colour:	colourless, clear	
Odour:	flowery, fruity	
Odour threshold:	< 100 ppm	
pH value:	4.4 (0.0159 g/l, 20 °C)	(pH Meter)
Melting point:	< -100 °C	(OECD Guideline 102)
Boiling point:	239.8 °C (1,013 hPa)	(measured)
Flash point:	93.5 °C	(ASTM D93, closed cup)
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Flammability (solid/gas):	hardly combustible	(derived from flash point)
Lower explosion limit:	0.6 %(V) (90.7 °C)	(air)

Upper explosion limit:	For liquids not relevant for classification and labelling.	
Ignition temperature:	235 °C	(DIN 51794)
Thermal decomposition:	>= 390 °C No exothermic decomposition within the mentioned temperature range.	(DSC (DIN 51007))
Self ignition:	Based on its structural properties the product is not classified as self-igniting.	Test type: Spontaneous self-ignition at room-temperature.
Self heating ability:	It is not a substance capable of spontaneous heating.	
SADT:	Study scientifically not justified.	
Explosion hazard:	Based on the chemical structure there is no indication of explosive properties.	
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	
Vapour pressure:	0.0197 hPa (20 °C) Extrapolated value, dynamic	(measured)
Density:	0.888 g/cm3 (20 - 25 °C) Literature data. 0.862 g/cm3 (55 °C)	
Relative density:	0.888 (25 °C) Literature data.	
Relative vapour density (air):	6.83 (20 °C) Heavier than air.	(calculated)
Solubility in water:	15.9 mg/l (25 °C)	
Solubility (qualitative) solvent(s):	organic solvents soluble	
Partitioning coefficient n-octanol/water (log Pow):	4.9 (25 °C)	(Directive 92/69/EEC, A.8)
Adsorption/water - soil:	KOC: 2409; log KOC: 3.382	(calculated)
Surface tension:	Based on chemical structure, surface activity is not to be expected.	

Viscosity, dynamic:	2.37 mPa.s (20 °C) The value was determined by calculation from the detected kinematic viscosity.	(OECD Guideline 114)
	1.58 mPa.s (40 °C) The value was determined by calculation from the detected kinematic viscosity.	(OECD Guideline 114)
Viscosity, kinematic:	2.66 mm2/s (20 °C)	(OECD Guideline 114)
	1.81 mm2/s (40 °C)	(OECD Guideline 114)
Molar mass:	198.31 g/mol	

10. Stability and Reactivity

Conditions to avoid:
See SDS section 7 - Handling and storage.

Thermal decomposition: >= 390 °C (DSC (DIN 51007))
No exothermic decomposition within the mentioned temperature range.

Substances to avoid:
oxidizing agents

Corrosion to metals: Corrosive effects to metal are not anticipated.

Hazardous reactions:
No hazardous reactions if stored and handled as prescribed/indicated.

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

Chemical stability:
The product is stable if stored and handled as prescribed/indicated.

Reactivity:
No hazardous reactions if stored and handled as prescribed/indicated.

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:
LD50rat (oral): 6,800 mg/kg

Acute dermal toxicity

LD50 rabbit (dermal): > 2,000 mg/kg

Assessment of acute toxicity

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Symptoms

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.
(Further) symptoms and / or effects are not known so far

Irritation

Assessment of irritating effects:
Skin contact causes irritation. Not irritating to the eyes.

Experimental/calculated data:
Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:
Skin sensitizing effects were not observed in animal studies. A controlled medical study in humans did not reveal a skin sensitizing effect.

Experimental/calculated data:
Buehler test guinea pig: Non-sensitizing. (OECD Guideline 406)

Human Maximization Test human: Non-sensitizing.

Germ cell mutagenicity

Assessment of mutagenicity:
In the majority of tests performed (bacteria/microorganisms/cell cultures) a mutagenic effect was not found. A mutagenic effect was also not observed in in-vivo assays. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity:
In long-term studies in rats and mice in which the substance was given by gavage, a carcinogenic effect was not observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Developmental toxicity

Assessment of teratogenicity:
In animal studies the substance did not cause malformations. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Specific target organ toxicity (single exposure)

Based on available data, the classification criteria are not met.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
No substance-specific organtoxicity was observed after repeated administration to animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration hazard

No aspiration hazard expected.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:
Acutely toxic for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:
LC50 (96 h) 6.1 mg/l, Brachydanio rerio (OECD Guideline 203, semistatic)
The statement of the toxic effect relates to the analytically determined concentration.

Aquatic invertebrates:
EC50 (48 h) 3.48 mg/l, Daphnia magna (OECD Guideline 202, part 1, semistatic)
The statement of the toxic effect relates to the analytically determined concentration. The product has low solubility in the test medium. A saturated solution has been tested.

Aquatic plants:
EC50 (72 h) > 7.2 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)
The statement of the toxic effect relates to the analytically determined concentration.

No observed effect concentration (72 h) 2.22 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)
The statement of the toxic effect relates to the analytically determined concentration.

Microorganisms/Effect on activated sludge:
EC20 (30 min) > 1,000 mg/l, activated sludge (OECD Guideline 209, aerobic)

Chronic toxicity to fish:
No data available regarding toxicity to fish.

Chronic toxicity to aquatic invertebrates:
No data available regarding toxicity to daphnids.

Assessment of terrestrial toxicity:

Mobility

Assessment transport between environmental compartments:
The substance will rapidly evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is expected.

Persistence and degradability

Elimination information:
93 % CO2 formation relative to the theoretical value (28 d) (OECD Guideline 310) (aerobic, activated sludge, domestic, adapted)

Assessment of stability in water:
In contact with water the substance will hydrolyse slowly.

Information on Stability in Water (Hydrolysis):
$t_{1/2}$ 4,101 h (20 °C, pH value 4), (OECD Guideline 111, pH 4)

$t_{1/2}$ 2,523 h (25 °C, pH value 4), (OECD Guideline 111, pH 4)

$t_{1/2}$ 8,191 h (20 °C, pH value 7), (OECD Guideline 111, pH 7)

$t_{1/2}$ 4,905 h (25 °C, pH value 7), (OECD Guideline 111, pH 7)

$t_{1/2}$ 337 h (20 °C, pH value 9), (OECD Guideline 111, pH 9)

$t_{1/2}$ 185 h (25 °C, pH value 9), (OECD Guideline 111, pH 9)

Bioaccumulation potential

Bioaccumulation potential:
No data available.

13. Disposal Considerations

Observe national and local legal requirements.

14. Transport Information

Domestic transport:

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRONELLYL ACETATE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for	None known

user:

Sea transport
IMDG

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRONELLYL ACETATE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes Marine pollutant: YES
Special precautions for user:	EmS: F-A; S-F

Air transport
IATA/ICAO

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRONELLYL ACETATE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Further information
Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

Any other intended applications should be discussed with the manufacturer.Corresponding occupational protection measurements must be followed.

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.