SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-T-25199
Product Name	Beta-Geranyl Acetate
CAS No.	105-87-3
Category	Fine Chemicals
Synonyms	Geranyl ethanoate; Acetic acid, geraniol ester; trans-3,7-Dimethyl-2,6-octadien-1-yl acetate
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Skin irritation (Category 2)

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

H412	Not available

Precautionary Statement(s)

Code	Statement
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P272	Not available
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P321	Specific treatment (see … on this label).
P332+P317	If skin irritation occurs: Get medical help.
P333+P317	Not available
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Not available
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Beta-Geranyl Acetate
CAS Number : 105-87-3
Molecular Formula : C■■H■■O■
Molecular Weight : 196.29
Parent Chemical : .
Synonyms : Geranyl ethanoate; Acetic acid, geraniol ester; trans-3,7-Dimethyl-2,6-octadien-1-yl acetate
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
- General advice: Remove contaminated clothing and shoes. Seek medical attention if symptoms persist or develop.
- Inhalation: Move person to fresh air. If breathing is difficult, seek medical attention.
- Skin contact: Wash with plenty of soap and water. Get medical attention if irritation occurs.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

- Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed
- Not available.

4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.
- No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
- Suitable extinguishing media: Use extinguishing measures appropriate to surrounding fire (e.g., water spray, alcohol-resistant foam, dry chemical, carbon dioxide).
- Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture
- Hazardous combustion products: Carbon oxides.
- Specific hazards: Not available.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Cool containers with water spray if exposed to fire.
- Prevent fire-fighting water from entering drains or waterways.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Avoid breathing vapors/mist.
- Avoid contact with skin and eyes.
- Use appropriate personal protective equipment (see Section 8).
- Ensure adequate ventilation.

6.2 Environmental precautions
- Avoid release to the environment.
- Prevent entry into drains, sewers, or waterways.

6.3 Methods and material for containment and cleaning up
- Contain spill with inert absorbent material (e.g., sand, earth, vermiculite).
- Collect into suitable, labeled containers for disposal.
- Clean spill area with suitable cleaning method; avoid generating aerosols.

6.4 Reference to other sections
- See Section 8 for personal protective equipment.
- See Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Handle in accordance with good industrial hygiene and safety practice.
- Avoid breathing vapors/mist.
- Avoid contact with skin and eyes.
- Use only with adequate ventilation.
- Keep container tightly closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities
- Store in a cool, dry, well-ventilated place.
- Keep away from heat, sparks, open flames, and other ignition sources.
- Store in original container, tightly closed.
- Incompatible materials: Not available.

7.3 Specific end use(s)
- Fine chemical / laboratory use. No data available for additional specific uses.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
- Occupational exposure limits: Not available.
- Biological limit values: Not available.

8.2 Exposure controls
- Engineering controls: Provide adequate ventilation. Use local exhaust where appropriate.
- Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves (material selection based on permeation data; not available). Protective clothing as needed.
- Respiratory protection: If ventilation is inadequate, use appropriate respiratory protection. Specific recommendations: Not available.
- Hygiene measures: Wash hands after handling. Remove contaminated clothing and wash before reuse.
- Environmental exposure controls: Avoid release to the environment; prevent discharge to drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	Colorless clear liquid
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity

10.1 Reactivity
- No data available.

10.2 Chemical stability
- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
- No data available.

10.4 Conditions to avoid
- Heat, flames, sparks, and other ignition sources.
- Extreme temperatures. No data available.

10.5 Incompatible materials

- Not available.

10.6 Hazardous decomposition products
- Carbon oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: /OTHER TOXICITY INFORMATION/ NONE OF THESE PERFUME ACETATES SEEMS TO HAVE GIVEN RISE TO ANY HEALTH PROBLEMS IN MANUFACTURING, HANDLING, OR IN THEIR END USES. SKIN SENSITIZATION TO THEM APPEARS TO BE RARE.[Patty, F. (ed.). Industrial Hygiene and Toxicology: Volume II: Toxicology. 2nd ed. New York: Interscience Publishers, 1963., p. 1864] /LABORATORY ANIMALS: Acute Exposure/ Groups of 5 male and female F344/N rats and B6C3F1 mice were administered a single dose of food-grade geranyl acetate (500, 1,000, 2,000, 4,000, or 8,000 mg/kg bw) in corn oil by gavage. All rats receiving 8,000 mg geranyl acetate/kg bw died on day 2. Four of the 5 male mice and all of the female mice receiving 8,000 mg/kg died. All mice administered 1,000-8,000 mg/kg were inactive immediately after dosing.No other deaths occurred among the rats or mice.[Carcinogenesis Studies of Food Grade Geranyl Acetate (71% Geranyl acetate, 29% Citronellyl Acetate) in F344/N Rats and B6C3F1 Mice (Gavage Study). Technical Report Series No. 252 (1987) NIH Publication No. 88-2508 U.S. Department of Health and Human Services, National Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, NC 27709]
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: /OTHER TOXICITY INFORMATION/ NONE OF THESE PERFUME ACETATES SEEMS TO HAVE GIVEN RISE TO ANY HEALTH PROBLEMS IN MANUFACTURING, HANDLING, OR IN THEIR END USES. SKIN SENSITIZATION TO THEM APPEARS TO BE RARE.[Patty, F. (ed.). Industrial Hygiene and Toxicology: Volume II: Toxicology. 2nd ed. New York: Interscience Publishers, 1963., p. 1864]
- Germ cell mutagenicity: /GENOTOXICITY/ Geranyl acetate was tested for mutagenicity in the Salmonella/microsome preincubation assay using the standard protocol approved by the National Toxicology Program. Geranyl acetate was tested at doses of 0.001, 0.003, 0.010, 0.033, 0.10, 0.33, 1.0, and 3.3 mg/plate in as many as 5 Salmonella typhimurium strains (TA1535, TA1537, TA97, TA98, and TA100) in the presence and absence of rat or hamster liver S-9. Geranyl acetate was negative in these tests and the highest ineffective dose tested in any S. typhimurium strain was 3.3 mg/plate.[Mortelmans K et al; Environ Mutagen 8:1-119 (1986)]
- Carcinogenicity: /LABORATORY ANIMALS: Acute Exposure/ Groups of 5 male and female F344/N rats and B6C3F1 mice were administered a single dose of food-grade geranyl acetate (500, 1,000, 2,000, 4,000, or 8,000 mg/kg bw) in corn oil by gavage. All rats receiving 8,000 mg geranyl acetate/kg bw died on day 2. Four of the 5 male mice and all of the female mice receiving 8,000 mg/kg died. All mice administered 1,000-8,000 mg/kg were inactive immediately after dosing.No other deaths occurred among the rats or mice.[Carcinogenesis Studies of Food Grade Geranyl Acetate (71% Geranyl acetate, 29% Citronellyl Acetate) in F344/N Rats and B6C3F1 Mice (Gavage Study). Technical Report Series No. 252 (1987) NIH Publication No. 88-2508 U.S. Department of Health and Human Services, National Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, NC 27709] /LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ Groups of 10 male and female F344/N rats were administered food grade geranyl acetate at doses of 0, 250, 500, 1,000, 2,000, or 4,000 mg/kg bw in corn oil by gavage, 5 days a week for 13 weeks. Groups of 10 male and female B6C3F1 mice received doses of 0, 125, 250, 500, 1,000, or 2,000 mg/kg on the same schedule. Two of 10 male rats and 1 of 10 female rats receiving 4,000 mg/kg died. At 4,000 mg/kg mean body weight compared to controls was depressed 19% in males and 8% in females. Reddened mucosa of the stomach was observed in 3 of 10 males at 4,000 mg/kg. No compound-related histopathologic effects were observed in any of the rats at necropsy.Seven of 10 male mice and 9

of 10 female mice receiving 2,000 mg/kg died. Except for males that received 2,000 mg/kg, mean body weights of dosed mice were comparable with those of the controls. Cytoplasmic vacuolization of the liver, kidney, and myocardium was observed in male and female mice at the 2,000 mg/kg dose level. ...Because of the presence of lipids in the vacuoles, this lesion is sometimes referred to as lipidosis. ... Stomach lesions, consisting of focal suppurative, inflammation, focal ulcerative inflammation, or submucosal edema were found in 2 of 10 males and 6 of 10 females at the 2,000 mg/kg dose.[Carcinogenesis Studies of Food Grade Geranyl Acetate (71% Geranyl acetate, 29% Citronellyl Acetate) in F344/N Rats and B6C3F1 Mice (Gavage Study). Technical Report Series No. 252 (1987) NIH Publication No. 88-2508 U.S. Department of Health and Human Services, National Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, NC 27709]
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: /LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ Groups of 5 male and female F344/N rats and B63F1 mice were administered food grade geranyl acetate in corn oil by gavage for 14 consecutive days at doses of 0, 62, 125, 250, 500, or 1,000 mg/kg bw (rats) or 0, 125, 250, 500, 1,000, or 2,000 mg/kg bw (mice). All rats survived to the end of the dosing period. The activity of all rats that received 1,000 mg/kg decreased after dosing between days 2 and 4 of the studies. No compound-related effects were observed in rats during necropsy. Three female mice that received 2,000 mg/kg died. All other mice survived to the end of the 14-day dosing period. All mice that received 1,000 mg/kg or more were inactive after the dose was administered but they returned to normal within 24 hours. One of the 5 male mice that received 2,000 mg/kg had a thickened duodenal wall, and 3 of 5 female mice receiving 2,000 mg/kg had a thickened wall of the cardiac stomach. These effects were considered to be compound related. /LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ Groups of 10 male and female F344/N rats were administered food grade geranyl acetate at doses of 0, 250, 500, 1,000, 2,000, or 4,000 mg/kg bw in corn oil by gavage, 5 days a week for 13 weeks. Groups of 10 male and female B6C3F1 mice received doses of 0, 125, 250, 500, 1,000, or 2,000 mg/kg on the same schedule. Two of 10 male rats and 1 of 10 female rats receiving 4,000 mg/kg died. At 4,000 mg/kg mean body weight compared to controls was depressed 19% in males and 8% in females. Reddened mucosa of the stomach was observed in 3 of 10 males at 4,000 mg/kg. No compound-related histopathologic effects were observed in any of the rats at necropsy.Seven of 10 male mice and 9 of 10 female mice receiving 2,000 mg/kg died. Except for males that received 2,000 mg/kg, mean body weights of dosed mice were comparable with those of the controls. Cytoplasmic vacuolization of the liver, kidney, and myocardium was observed in male and female mice at the 2,000 mg/kg dose level. ...Because of the presence of lipids in the vacuoles, this lesion is sometimes referred to as lipidosis. ... Stomach lesions, consisting of focal suppurative, inflammation, focal ulcerative inflammation, or submucosal edema were found in 2 of 10 males and 6 of 10 females at the 2,000 mg/kg dose.[Carcinogenesis Studies of Food Grade Geranyl Acetate (71% Geranyl acetate, 29% Citronellyl Acetate) in F344/N Rats and B6C3F1 Mice (Gavage Study). Technical Report Series No. 252 (1987) NIH Publication No. 88-2508 U.S. Department of Health and Human Services, National Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, NC 27709]
- Aspiration hazard: No data available.

Likely routes of exposure
- No data available.

Symptoms related to the physical, chemical and toxicological characteristics
- /LABORATORY ANIMALS: Subchronic or Prechronic Exposure/ Groups of 5 male and female F344/N rats and B63F1 mice were administered food grade geranyl acetate in corn oil by gavage for 14 consecutive days at doses of 0, 62, 125, 250, 500, or 1,000 mg/kg bw (rats) or 0, 125, 250, 500, 1,000, or 2,000 mg/kg bw (mice). All rats survived to the end of the dosing period. The activity of all rats that received 1,000 mg/kg decreased after dosing between days 2 and 4 of the studies. No compound-related effects were observed in rats during necropsy. Three female mice

that received 2,000 mg/kg died. All other mice survived to the end of the 14-day dosing period. All mice that received 1,000 mg/kg or more were inactive after the dose was administered but they returned to normal within 24 hours. One of the 5 male mice that received 2,000 mg/kg had a thickened duodenal wall, and 3 of 5 female mice receiving 2,000 mg/kg had a thickened wall of the cardiac stomach. These effects were considered to be compound related.

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
- No data available.

12.2 Persistence and degradability
- No data available.

12.3 Bioaccumulative potential
- No data available.

12.4 Mobility in soil
- No data available.

12.5 Results of PBT and vPvB assessment
- Not available.

12.6 Endocrine disrupting properties
- No data available.

12.7 Other adverse effects
- No data available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.
- Recommended disposal method: Not available.
- Contaminated packaging: Dispose of as unused product in accordance with applicable regulations.

SECTION 14: Transport information

SECTION 14: Transport information

- UN number: Not available.
- UN proper shipping name: Not available.
- Transport hazard class(es): Not available.
- Packing group: Not available.
- Environmental hazards: Not available.
- Special precautions for user: Not available.
- Transport in bulk according to IMO instruments: Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Regulatory status/inventories: Not available.

15.2 Chemical safety assessment
- No data available.

SECTION 16: Other information

SECTION 16: Other information

- Product name: Beta-Geranyl Acetate
- CAS No.: 105-87-3
- Catalog No.: CS-T-25199
- Synonyms: Geranyl ethanoate; Acetic acid, geraniol ester; trans-3,7-Dimethyl-2,6-octadien-1-yl acetate
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Disclaimer:
- The information provided is based on available product identification details and is intended for SDS-format guidance. No warranty is expressed or implied. Users are responsible for compliance with applicable laws and regulations and for determining suitability for a particular purpose.
- Revision date: Not available.

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