

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE A0501
PRODUCT NAME GERANIOL 600
SUPPLIER Shanghai M & U International Trade Co., Ltd.
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FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)

2. HAZARD IDENTIFICATION:

Emergency Overview

OSHA Hazards

Skin sensitiser, Irritant.

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2)
Serious eye damage (Category 1)
Skin sensitisation (Category 1)
Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements

Pictogram:



Signal word

Danger

Hazard statement(s)

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H402 Harmful to aquatic life.

Precautionary statement(s)

P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P302 P352	IF ON SKIN: Wash with plenty of soap and water.
P305 P351 P338	IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.
P321	Specific treatment (see supplemental first aid instructions on this label).
P333 P313	If skin irritation or rash occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P501	Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard 1
 Flammability 1
 Physical hazards 0

NFPA Rating

Health hazard 1
 Fire 1
 Reactivity Hazard 0

Potential Health Effects

Inhalation

May be harmful if inhaled. Causes respiratory tract irritation.

Skin

May be harmful if absorbed through skin. Causes skin irritation.

Eyes

Causes eye irritation.

Ingestion

May be harmful if swallowed.

3. COMPOSITION AND INFORMATION ON INGREDIENTS:

SYNONYM:	trans-3,7-Dimethyl-2,6-octadien-1-ol
Formula:	C10 H18 O
Molecular Weight:	154.25 g/mol
CAS-No.:	106-24-1
EC-No.:	203-377-1
Index-No.:	N/A
Concentration:	N/A

4. FIRST-AID GUIDE:

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING GUIDE:

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions- Carbon oxides.

6. ACCIDENTAL RELEASE GUIDE:

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE:

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE AND PERSONAL PROTECTION:

Exposure controls/personal protection

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance	
Form	LIQUID
Colour	COLORLESS TO PALE YELLOW
Safety data	
pH	no data available
Melting point (°C)	no data available
Boiling point (°C)	229
Flash point (°F) Closed cup	>200
Ignition temperature	no data available
Auto ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure (mm Hg@20 °C)	0.02
Density @25 °C	0.880
Water solubility	INSOLUBLE
Partition coefficient (n-octanol/water)	no data available
Relative vapour density	5.0
Odor	FLORAL
Odour Threshold	no data available
Evaporation rate	no data available

10. STABILITY AND REACTIVITY:

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Materials to avoid

Strong oxidizing agents, Acid chlorides, Acid anhydrides.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - no data available.

11. TOXICOLOGICAL INFORMATION:

Acute toxicity

Oral LD50 - rat - 3,600 mg/kg

Remarks: Behavioral: Somnolence (general depressed activity). Behavioral: Coma. Skin and Appendages:

Other: Hair.

Inhalation LC50

No data available

Dermal LD50

LD50 Dermal - rabbit -> 5,000 mg/kg

Other information on acute toxicity

No data available

Skin corrosion/irritation

Skin -rabbit- Irritating to skin - 24 h - OECD Test Guideline 404

Serious eye damage/eye irritation

Eyes - rabbit - Risk of serious damage to eyes. - 24 h - Directive 67/548/EEC, Annex V, B.5.

Respiratory or skin sensitization

Guinea pig-May cause sensitisation by skin contact.

Germ cell mutagenicity

No data available

Carcinogenicity**IARC:**

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 a carcinogen or potential carcinogen by ACGIH.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation

May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin. Causes skin irritation.

Eyes

Causes eye irritation.

Signs and Symptoms of Exposure

Burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache.

Synergistic effects

No data available

Additional Information

RTECS: RG5830000

12. ECOLOGICAL INFORMATION:

Toxicity

Toxicity to fish

Static test LC50 - Danio rerio (zebra fish) - ca. 22 mg/l - 96 h

Method: OECD Test Guideline 203.

Toxicity to daphnia and other aquatic invertebrates.

Immobilization EC50 - Daphnia magna (Water flea) - 10.8 mg/l - 48 h

Method: OECD Test Guideline 202

Toxicity to algae

Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - 13.1 mg/l - 72 h.

Persistence and degradability

Biodegradability aerobic Chemical oxygen demand.

Result: 80 - 100% readily biodegradable.

Method: OECD Test Guideline 301A.

Bioaccumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

13. DISPOSAL RECOMMENDATIONS:**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company, Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORTATION INFORMATION:**DOT (US)**

Not dangerous goods.

IMDG

Not dangerous goods.

IATA

Not dangerous goods.

15. REGULATORY INFORMATION:**OSHA Hazards**

Skin sensitiser, Irritant.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard.

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

Geraniol

CAS-No.: 106-24-1

Revision Date: 1989-12-01

New Jersey Right to Know Components

Geraniol

CAS-No.: 106-24-1

Revision Date: 1989-12-01

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION:

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.

Prepared By: M&U International LLC

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