



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE A0199
PRODUCT NAME CITRAL
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 sensitizer, Irritant

GHS Classification

Acute toxicity, Oral (Category 5)

Acute toxicity, Dermal (Category 5)

Skin irritation (Category 2)

Skin sensitization (Category 1)

GHS Label elements, including precautionary statements

Pictogram

Signal word Warning

Hazard statement(s)

H303 H313

May be harmful if swallowed or in contact with skin

H315

Causes skin irritation

H317

May cause an allergic skin reaction

Precautionary statement(s)

P280

Wear protective gloves

HMIS Classification

Health hazard 1

Flammability 2

Physical hazards 0

NFPA Rating

Health hazard 1

Fire 2

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	3,7-Dimethyl-2,6-octadienal		
Formula	C10 H16 O		
Molecular Weight	152.24 g/mol		
CAS-No	EC-No	Index-No	Concentration
5932-40-5	226-394-6	605-019-00-3	<=100%

4. FIRST-AID GUIDE:

General advice

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

Flush eyes with water as a precaution

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 firefighters

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

Environmental precautions

Do not let product enter drains

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:

Components with workplace control parameters.

Components	Citra
CAS-No	5392-40-5

Value Control parameters Basis

TWA 5 ppm	USA ACGIH Threshold Limit Values (TLV)
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Remarks

Upper Respiratory Tract Irritation, Eye damage, Body weight effects

2010 Adoption; Not classifiable as a human carcinogen Danger of cutaneous absorption

Sensitizer

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

Face shield and safety glasses. 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 PALE YELLOW LIQUID

Safety data

pH no data available
Melting point (°C) no data available
Boiling point (°C) 229
Flash point (°F) Closed cup 183
Ignition temperature no data available
Auto ignition temperature no data available
Lower explosion limit 4.3% (V)
Upper explosion limit 9.9% (V)
Vapour pressure (mm Hg @20 °C) 0.2
Density @25 °C 0.893
Water solubility no data available
Partition coefficient:
n-octanol /water no data available
Relative vapour density 5.2
Odor LEMON TYPE
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, Strong acids, Strong bases

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

LD50 Oral - rat - 4,960 mg/kg

Remarks: Behavioral: Somnolence (general depressed activity)

Inhalation LC50

No data available

Dermal LD50

LD50 Dermal - rabbit - 2,250 mg/kg

Other information on acute toxicity

No data available

Skin corrosion/irritation

Skin - rabbit - Skin irritation - 24 h

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

May cause allergic skin reaction

Germ cell mutagenicity

No data available

Carcinogenicity**IARC**

No components 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 components 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 components 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 components 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

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

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

Cough, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Synergistic effects

No data available

Additional Information

RTECS: RC5075000

12. ECOLOGICAL INFORMATION:

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

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 sensitizer, 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

Citral	CAS-No	Revision Date
	5392-40-5	

New Jersey Right to Know Components

Citral	CAS-No	Revision Date
	5392-40-5	

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.