

HEALTH	2
FLAMMABILITY	1
REACTIVITY	0

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product Name	<b>Citral, Natural</b>
Product Number	<b>0230300</b>
CAS-No.	<b>5392-40-5</b>

### 1.2 Product Recommended Use

**Flavorings**

### 1.3 Preparation Information

Company	Aurochemicals 7 Nicoll Street Washingtonville, NY 10992 - USA
---------	---------------------------------------------------------------------

Telephone	845-496-6065
Fax	845-496-6248

### 1.4 Emergency Telephone Number

1-800-535-5053  
International - 1-352-323-3500 collect

## Section 2: HAZARD(s) IDENTIFICATION

### 2.1 Classification of substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)	OSHA HAZARDS: Skin sensitiser, Irritant
-----------------------------------------------------------------	-----------------------------------------

Acute toxicity, Oral (Category 5) H303  
Acute toxicity, dermal (Category 5), H313  
Skin irritation (Category 2) H315  
Skin sensitisation (Category 1) H317

### 2.2 GHS Label Elements, Including precautionary statements

Pictogram



Signal Statement

**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

### 2.3 HNOC (Hazards not otherwise)

None

classified or not covered by GHS

## Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms Geranial and neral mixture  
3,7 – Dimethyl-2-6-octadienal

Formula  $C_{10}H_{16}O$   
Molecular Weight 152.23 g/mol  
CAS-No 5392-40-5  
EC-No. 226-394-6

#### Hazardous Components

Component	Classification	Concentration
<b>Citral</b>	Acute toxicity, Oral (Category 5) H303 Acute toxicity, dermal (Category 5), H313 Skin irritation (Category 2) H315 Skin sensitisation (Category 1) H317	<=100%

## Section 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

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

Inhalation Provide fresh air; keep at rest and at a comfortable position to breathe. Consult a physician

Contact with skin: Remove contaminated clothing. Rinse skin with cool water then wash with mild soap and warm water. Consult a physician

Contact with eyes: Rinse thoroughly with plenty of water for at least 15 as a precaution.

Ingestion DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Clothing contamination: Remove contaminated clothing and wash before reuse.

**4.2 Most important symptoms and effects both acute and delayed** See section 2.2 and or section 11

**4.3 Indication of any immediate medical attention and special treatment needed.** No data available

## Section 5: FIREFIGHTING MEASURES

**5.1 Extinguishing Media**  
Suitable Extinguishing Media Use water spray, alcohol resistant foam, dry chemicals or carbon dioxide

**5.2 Special hazards arising from the substance or mixture** Carbon oxides

- 5.3 **Advice for fire fighters** Wear self contained breathing apparatus for firefighting if necessary.
- 5.4 **Further information** No data available

## Section 6: ACCIDENTAL RELEASE MEASURES

- 6.1 **Personal precautions, protective equipment and emergency procedures** Use personal protective equipment. Avoid breathing vapors. Mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
- 6.2 **Environment precautions** Prevent further leakage or spillage if safe to do so. Do not allow to enter drains or sewage system.
- 6.3 **Methods and materials for containment and clean up** Soak up with absorbent material. Sweep up with broom and shovel. Place in a suitable, closed container for disposal.
- 6.4 **Specific end use(s)** Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

## Section 7: HANDLING AND STORAGE

- 7.1 **Precautions for safe handling** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
- 7.2 **Conditions for Safe storage** Keep container tightly closed in a dry and well-ventilated place. Handle and store under inert gas. Air and moisture sensitive.
- 7.3 **Specific End use(s)** Flavorings

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 **Control parameters**  
Components with workplace control parameters

Components	CAS-No.	Value	Control Parameters	Basis
Citral	5392-40-5	TWA	5 ppm	USA. ACGIH Threshold Limit Values (TLV)
REMARKS		Upper respiratory Tract Irritation, Eye damage body weight affects 2010 Adoption. Not classified as a human carcinogen. Danger of cutaneous absorption. Sensitizer.		

- 8.2 **Exposure Controls**  
Appropriate Engineering Controls Handle in accordance with good industrial hygiene and safety practices. Mechanical exhaust required, Safety Shower and Eye Bath.
- Personal protective equipment** **These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. They should not be construed as offering an approval for any specific use scenario**
- Eye/face protection Wear appropriate tightly fitting safety goggles. NIOSH tested and approved.
- Skin protection Wear chemically resistant gloves of Butyl-Rubber, 0.3mm thick. Use proper glove removal techniques (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.

Body protection	Complete suite protecting against chemicals, made of flame retardant antistatic material should be selected specifically for the work place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
Respiratory protection	Where risk assessment shows air-purifying respirators are appropriate use a full face respirator with multi-purpose 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).
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a	Appearance	Pale yellow oily liquid
b	Odor	Citrus
c	Odor Threshold	No data available
d	pH	No data available
e	Melting Point /Freezing Point	No data available
f	Boiling Point	228°C
g	Flash Point	95°C closed cup
h	Evaporation Rate	No data available
i	Flammability (Solid, Gas)	No data available
j	Upper/lower Explosion Limit	Lower Explosion Limit: 4.3% Upper Explosion Limit: 9.9%
k	Vapor pressure	< 1 hPa @50°C
l	Vapor density	5.26 (Air=1.0)
m	Relative density@25°C	0.885-0.891
n	Solubility	Very slightly soluble in water, insoluble in glycerol, soluble in fixed oils, mineral oils, propylene glycol & ethanol
o	Partition coefficient: n-octanol/water	No data available
p	Auto-ignition Temp.	No data available
q	Decomposition Temp.	No data available
r	Viscosity	No data available
s	Explosive properties	No data available
t	Oxidizing properties	No data available
9.2	<b>Other Safety Information</b>	No data available

## Section 10: STABILITY AND REACTIVITY

10.1	<b>Reactivity</b>	No data available
10.2	<b>Chemical Stability</b>	Stable under recommended storage conditions
10.3	<b>Possibility of Hazardous reactions</b>	No data available
10.4	<b>Conditions to avoid</b>	No data available
10.5	<b>Incompatible materials</b>	Strong oxidizing agents, Strong acids, Strong bases
10.6	<b>Hazardous decomposition products</b>	Formed under fire conditions – Carbon Oxides

10.7 Further Information No data available

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Toxicity

LD50-Oral-Rat

4,960 mg/kg

Remarks: Behavioral: Somnolence (general depressed activity)

LC50-Inhalation

No data available

LD50-Dermal-Rabbit

2,250 mg/kg

Skin corrosion/irritation

Rabbit: Skin irritation -24hr

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 component of this product, present 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

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

Teratogenicity

No data available

Specific target organ toxicity-single exposure (GHS)

No data available

Specific target organ toxicity-repeated exposures (GHS)

No data available

Aspiration Hazards

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 effect No data available

RTECS: RG5075000

## 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	PBT/vPvB assessment not available as chemical safety assessment not required / not conducted
12.6 Other adverse effects	No data available

## Section 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods	
Product:	According to local regulations
Packaging	According to local regulations

## Section 14: TRANSPORT INFORMATION

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

## Section 15: REGULATORY INFORMATION

Reach No.	A registration number is not available for this substance as its uses are exempted from registration, the annual tonnage not require a registration or the registration is envisaged for a later registration deadline.		
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302		
SARA 313 Components	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# 5392-40-5	Rev. Date:
New Jersey Right to Know components	Citral	CAS# 5392-40-5	Rev. Date:
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.

## Section 16: OTHER INFORMATION

### HMIS Rating

Health hazard 2  
Chronic Health Hazard\*  
Flammability 1  
Reactive Hazard 0

### Further Information

Aurochemicals provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Aurochemicals makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Aurochemicals will not be responsible, nor held liable, for damages resulting from use of or reliance upon this information.

<b>Issued by:</b>	<b>Contact Person:</b>
Aurochemicals	Deo N. Persaud
7 Nicoll Street	Revised Date: 8/9/2022
Washingtonville, NY 10992 USA	