



(Citral)

DATE PREPARED: 8/26/2016

Section 1. Product and Company Identification

Product Name Citral

CAS Number 5392-40-5

Parchem - fine & specialty chemicals

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New Pochelle, NY 1080

New Rochelle, NY 10801

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EMERGENCY RESPONSE NUMBER

CHEMTEL

Toll Free US & Canada: 1 (800) 255-3924

All other Origins: 1 (813) 248-0585

Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture GHS-US classification

Flam. Liq. 4 - H227 - Combustible liquid Skin Irrit. 2 - H315 - Causes skin irritation

Skin Sens. 1B - H317 - May cause an allergic reaction

Aquatic Acute 2 - H401 - Toxic to aquatic life

GHS Label Elements

Pictograms:



Signal word: WARNING

Hazard and precautionary statements Hazard Statements

H227 - Combustible liquid

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H401 - Toxic to aquatic life

Precautionary Statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P261 -Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash hands thoroughly after handling

P272 - Contaminated work clothing must not be allowed out of the workplace

P273 - Avoid release to the environment





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P280 - Wear protective gloves/protective clothing/eye protection

P302+P352- IF ON SKIN: Wash with plenty of soap and water

P321 - Specific treatment (see supplemental first aid instruction on this label)

P332+P313 - If skin irritation occurs: Get medical advice/attention

P333+P313- If skin irritation or rash occurs: Get medical advice/attention

P362+P364- Take off contaminated clothing and wash it before reuse

P363 - Wash contaminated clothing before reuse

P370+P378 - In case of fire: Use media other than water to extinguish

P403+P235- Store in a well-ventilated place. Keep cool

P501 - Dispose in a safe manner in accordance with local/national regulations

Other hazards: No additional information available Unknown acute toxicity (GHS US): Not applicable

Section 3. Composition / Information on Ingredients

Common Name Citral **Formula** C₁₀H₁₆O **CAS Number** 5392-40-5

COMPONENT	CAS NUMBER	CONCENTRATION
Citral	5392-40-5	100%

Section 4. First Aid Measures

Description of first-aid measures

General: Unconscious: maintain adequate airway and respiration. Check the vital functions. Vomiting: prevent asphyxia/aspiration pneumonia. Respiratory arrest: artificial respiration or oxygen. Keep the victim calm, avoid physical strain. Keep watching the victim. Give psychological aid. Cardiac arrest: perform resuscitation. Get medical advice/attention if you feel unwell. Prevent cooling by covering the victim (no warming up).

Inhalation: If experiencing respiratory symptoms: Call a poison center or a doctor. Remove person to fresh air and keep comfortable for breathing.

Skin Contact: Wash skin with plenty of water. If irritation persists, consult a doctor. Remove/Take off immediately all contaminated clothing. Do not apply (chemical) neutralizing agents. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). Gently wash with plenty of soap and water.

Eye Contact: Rinse cautiously with water for several minutes. Consult an ophtalmologist if irritation persists. Do not apply (chemical) neutralizing agents. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse immediately with plenty of water.

Ingestion: Ingestion of large quantities: immediately to hospital. Do not induce vomiting. Rinse mouth. Immediately after ingestion: give lots of water to drink. Call a poison center or a doctor if you feel unwell.





Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact: Causes skin irritation. Tingling/irritation of the skin.

Symptoms/injuries after eye contact: Causes serious eye irritation.

Chronic symptoms: Skin rash/inflammation.

additional information available

Section 5. Firefighting Measures

Extinguishing media

Suitable extinguishing media: Sand. Polyvalent foam. BC-powder.

Unsuitable extinguishing media: None.

Special hazards arising from the substance or mixture

Fire hazard: Insufficient data. Heating may cause a fire or explosion. Fire hazard.

Explosion hazard: Sparks can induce fire of vapors. Explosion risk in case of fire. Could be

ignited by heat sparks or flame.

Reactivity: On burning formation of metallic fumes

Advice for firefighters

Precautionary measures fire: Keep upwind

Firefighting instructions: Cool tanks/drums with water spray/remove them into safety.

Protection during firefighting: Self-contained breathing apparatus

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

General measures: Face shield.

For non-emergency personnel

Protective equipment: Protective clothing. Gloves must be replaced after each use and whenever

signs of wear or perforation appear. Face shield.

Emergency procedures: No open flames, no sparks, and no smoking. Wash contaminated

clothes. Mark the danger area.

For emergency responders: No additional information available **Environmental precautions:** No additional information available

Methods and material for containment and cleaning up

For containment: Contain leaking substance, pump over in suitable containers. Consult "Material-handling" to select material of containers. Stop leak without risks if possible.





Methods for cleaning up: Take up liquid spill into a non-combustible material e.g.: dry sand/earth. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Wash clothing and equipment after handling.

Reference to other sections: No additional information available

Section 7. Handling and Storage

Precautions for Safe Handling

Precautions for safe handling: Flammable vapors may accumulate in the container. Use explosion-proof equipment. Keep container tight closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Remove contaminated clothing. Comply with local regulations for disposal. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection. Wash contaminated clothing before reuse. Observe strict hygiene.

Hygiene measures: Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Heat and ignition sources: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

Prohibitions on mixed storage: OXIDIZING AGENTS. Keep away from: Strong acids. Strong bases.

Storage area: Ventilation along the floor. Meet the legal requirements. Store in a dry, cool area. Store in a dark area. Keep out of direct sunlight.

Special rules on packaging: Opaque. Meet the legal requirements. Special rules on packaging.

After use replace the closing cap immediately.

Packaging materials: Glass. Aluminum. Suitable packing materials.

Section 8. Exposure Controls / Personal Protection

Control Parameters Citral (5392-40-5)

ACGIH	ACGIH TWA	5ppm
ACGIH	ACGIH STEL	5ppm

Exposure controls

Materials for protective clothing: No data available. No data available. Excellent resistance.

Hand protection: Gloves

Eye protection: Face shield

Skin and body protection: Wear suitable protective clothing. Protective clothing. **Respiratory protection:** In case of inadequate ventilation wear respiratory protection





Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Liquid **Appearance:** Liquid Color: Pale yellow **Odor:** Strong lemon odor

Odor Threshold: No data available

Section 10. Stability and Reactivity

Reactivity: On burning formation of metallic fumes.

Chemical stability: No data available.

Possibility of hazardous reactions: No additional information available

Conditions to avoid: No additional information available **Incompatible materials:** No additional information available

Hazardous decomposition products: No additional information available

Section 11. Toxicological Information

Information on Toxicological Effects

Acute Toxicity: Not classified

Citral (5392-40-5)

LD50 Oral - Rat: 4960 mg/kg (Rat) **LD50 Dermal - Rat:** > 2000 mg/kg (Rat) **LD50 Dermal - Rabbit:** 2250 mg/kg (Rabbit) ATE US (Oral): 4960.000 mg/kg bodyweight ATE US (Dermal): 2250.000 mg/kg bodyweight **Skin corrosion/irritation:** Causes skin irritation Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: May cause an allergic skin reaction

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Symptoms/injuries after skin contact: Causes skin irritation. Tingling/irritation of the skin

Symptoms/injuries after eye contact: Causes serious eye irritation

Chronic symptoms: Skin rash/inflammation





Section 12. Ecological Information

Toxicity

Ecology - General: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Ecology - Air: TA-Luft Klasse 5.2.5/1. Not dangerous for the ozone layer

Ecology - Water: Toxic to invertebrates (Daphnia). Harmful to algae. pH shift. Inhibition of

activated sludge. Toxic to fish. Mild water pollutant (surface water).

CITRAL (5392-40-5)

LC50 fish 1: 4.6 - 10 mg/l (96 h; Leuciscus idus) **EC50 Daphnia 1:** 7 mg/l (48 h; Daphnia magna) **EC50 Daphnia 2:** 11 mg/l (24 h; Daphnia magna)

Persistence and Degradability

CITRAL (5392-40-5)

Persistence and degradability: Readily biodegradable in water. not readily degradable in

water. Effect on ozone layer. Photodegradation in the air

Biochemical oxygen demand (BOD): $0.556g O_2/g$ substance Chemical oxygen demand (COD): $1.990g O_2/g$ substance

ThOD: $2.84g O_2/g$ substance

Bioaccumulative potential

CITRAL (5392-40-5)

BCF other aquatic organisms 1: 250 (Estimated value)

Log Pow: 2.76 - 3.45 (Estimated value)

Bioaccumulative potential: Bioaccumulative

Mobility in soil: No additional information available

Other adverse effects: No additional information available

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

Department of Transportation (DOT)

In accordance with DOT: Not regulated for transport

TOG: No additional information available

Transport by sea: No additional information available **Air transport:** No additional information available



Safety Data Sheet

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Section 15. Regulatory Information

US Federal regulations: Listed on the United States TSCA (Toxic Substances Control Act) inventory

International regulations

CANADA: No additional information available **EU-Regulations:** No additional information available **National regulations:** No additional information available

US State Regulations: No additional information available

HMIS Rating Health: 2

Flammability: 2 Reactivity: 0

Personal Protection: B

NFPA Rating Health: 2

Flammability: 1 Reactivity: 0

Section 16. Other Information

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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