

Material Safety Data Sheet: CITRUS KLAW

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CITRUS KLAW
Recommended use Cleaning agent
Information on Manufacturer

Product Code 0000
Chemical nature Solvent mixture
Emergency Telephone Number
CHEMTREC® 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER

Combustible liquid and vapor
Causes skin irritation
May cause allergic skin reaction
Causes eye irritation
May be harmful if inhaled
May cause allergic respiratory reaction
May be harmful if swallowed

Color Straw - Amber

Physical State Liquid

Odor Citrus

Potential Health Effects

Principle Route of Exposure

Primary Routes of Entry

Acute Effects

Eyes

Skin

Inhalation

Ingestion

Chronic Toxicity

Target Organ Effects

Aggravated Medical Conditions

Potential Environmental Effects

Skin contact, Eye contact, Inhalation.
Inhalation, Skin Absorption.

Causes eye irritation.

Causes skin irritation. May cause allergic skin reaction.

May cause irritation of respiratory tract. May cause allergic respiratory reaction. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

May cause sensitization by skin contact. May cause sensitization by inhalation. Liver and kidney injuries may occur. Contains a known or suspected reproductive toxin. Contains a known or suspected carcinogen.

Central nervous system, Liver, Kidney, Lungs, Immune system.

Respiratory disorders, Skin disorders, Liver disorders, Kidney disorders, Neurological disorders.

See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Component | CAS-No |
|--------------------|------------|
| 1-Tetradecene | 1120-36-1 |
| D-Limonene | 5989-27-5 |
| Tallamide DEA | 68155-20-4 |
| Cocamide DEA | 68603-42-9 |
| 2-Ethyl-1-dodecene | 19780-34-8 |
| 2-Hexyl-1-octene | 19780-80-4 |
| 2-Butyl-1-decene | 51655-65-3 |
| Diethanolamine | 111-42-2 |

4. FIRST AID MEASURES

General advice

Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.

Eye Contact

Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.

Inhalation

Move to fresh air. In case of shortness of breath, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion

Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

Notes to physician

May cause sensitization of susceptible persons. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

5. FIRE-FIGHTING MEASURES

| | | | |
|---|---|----------------|-----------------|
| Flash Point | 160 °F / 71 °C | Method | Seta closed cup |
| Autoignition Temperature | No information available. | | |
| Flammability Limits in Air % | Solvent mixture. | Upper 6.1 | Lower 0.5 |
| Suitable Extinguishing Media | Foam. Carbon dioxide (CO ₂). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. | | |
| Specific hazards arising from the chemical | Combustible Liquid. Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Material can create slippery conditions. | | |
| Protective Equipment and Precautions for Firefighters | As in any fire, wear self-contained breathing apparatus pressure -demand, MSHA/NIOSH (approved or equivalent) and full protective gear. | | |
| NFPA | Health 2 | Flammability 2 | Instability 0 |
| HMS | Health 2 | Flammability 2 | Instability 0 |

6. ACCIDENTAL RELEASE MEASURES

| | |
|---------------------------|--|
| Personal Precautions | Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions. |
| Environmental Precautions | Do not flush into surface water or sanitary sewer system. |
| Methods for Containment | Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13) |
| Methods for Cleaning Up | Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers. |
| Neutralizing Agent | Not applicable. |

7. HANDLING AND STORAGE

| | | | | |
|---------------------|---|---------------|---------|---------------------|
| Handling | Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Take precautionary measures against static discharges. | | | |
| Storage | Keep away from heat and sources of ignition. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. | | | |
| Storage Temperature | Minimum | 30 °F / -1 °C | Maximum | 120 °F / 49 °C |
| Storage Conditions | Indoor | X | Outdoor | Heated Refrigerated |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH |
|--------------------|----------------------------------|-------------------|---|
| 1-Tetradecene | No data available | No data available | No data available |
| D-Limonene | No data available | No data available | No data available |
| Tallamide DEA | No data available | No data available | No data available |
| Cocamide DEA | No data available | No data available | No data available |
| 2-Ethyl-1-dodecene | No data available | No data available | No data available |
| 2-Hexyl-1-octene | No data available | No data available | No data available |
| 2-Butyl-1-decene | No data available | No data available | No data available |
| Diethanolamine | TWA: 1 mg/m ³ Skin | No data available | TWA: 3 ppm TWA: 15 mg/m ³ |

| | |
|--------------------------------|--|
| Engineering Measures | Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. |
| Personal Protective Equipment | |
| Eye/Face Protection | Safety glasses with side-shields. |
| Skin Protection | Wear suitable protective clothing, Impervious gloves. |
| Respiratory Protection | In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. |
| General Hygiene Considerations | Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|----------------|--------|-----------|-------------|
| Physical State | Liquid | Viscosity | Non viscous |
|----------------|--------|-----------|-------------|

| | | | |
|----------------------------|------------------|----------------------------|------------------------|
| Color | Straw - Amber | Odor | Citrus |
| Appearance | Transparent | pH | Not applicable |
| Specific Gravity | 0.803 | Evaporation Rate | 0.02 (Butyl acetate=1) |
| Percent Volatile (Volume) | 91.6 | VOC Content (%) | 90.3 |
| VOC Photoreactive (Y/N) | Yes | VOC Max Use Dilution (g/L) | 40 |
| VOC Max Use Dilution (wt%) | 5.0 | VOC Content (g/L) | 752 |
| Vapor Pressure | 0.37 mmHg @ 70°F | Vapor Density | 4.9 (Air = 1.0) |
| Solubility | Emulsifiable | Boiling Point/Range | > 430 °F / 221 °C |

10. STABILITY AND REACTIVITY

| | |
|------------------------------------|---|
| Chemical Stability | Stable. Hazardous polymerization does not occur. |
| Conditions to Avoid | Keep away from open flames, hot surfaces, and sources of ignition |
| Incompatible Products | Strong oxidizing agents, Strong acids, Strong bases, Halogenated hydrocarbon, Rubber products, Vinyl compounds. |
| Hazardous Decomposition Products | Carbon oxides, Nitrogen oxides (NOx). |
| Possibility of Hazardous Reactions | None under normal processing |

11. TOXICOLOGICAL INFORMATION

Product Information No information available.

Component Information

Acute Toxicity

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation | Draize Test | Other |
|--------------------|--|---|-------------------|-------------------|-------------------|
| 1-Tetradecene | = 21300 mg/kg (Rat) > 10000 mg/kg (Rat) | = 10000 mg/kg (Rabbit) > 10000 mg/kg (Rabbit) > 2430 mg/kg (Rabbit) | no data available | no data available | no data available |
| D-Limonene | = 4400 mg/kg (Rat) | > 5 g/kg (Rabbit) | no data available | no data available | no data available |
| Tallamide DEA | no data available | no data available | no data available | no data available | no data available |
| Cocamide DEA | no data available | no data available | no data available | no data available | no data available |
| 2-Ethyl-1-dodecene | no data available | no data available | no data available | no data available | no data available |
| 2-Hexyl-1-octene | no data available | no data available | no data available | no data available | no data available |
| 2-Butyl-1-decene | no data available | no data available | no data available | no data available | no data available |
| Diethanolamine | = 0.62 mL/kg (Rat) | no data available | no data available | no data available | no data available |

Chronic Toxicity

| Component | Mutagenicity | Sensitization | Developmental Toxicity | Reproductive Toxicity | Target Organ Effects |
|--------------------|-------------------|--|------------------------|-----------------------|--|
| 1-Tetradecene | no data available | no data available | no data available | no data available | no data available |
| D-Limonene | no data available | Skin sensitization, Respiratory sensitization | no data available | no data available | CNS, immune system, lungs, liver, kidneys |
| Tallamide DEA | no data available | no data available | no data available | no data available | no data available |
| Cocamide DEA | no data available | no data available | no data available | no data available | no data available |
| 2-Ethyl-1-dodecene | no data available | no data available | no data available | no data available | no data available |
| 2-Hexyl-1-octene | no data available | no data available | no data available | no data available | no data available |
| 2-Butyl-1-decene | no data available | no data available | no data available | no data available | no data available |
| Diethanolamine | no data available | Skin sensitization | no data available | X | eyes, respiratory system, skin, CNS, liver, blood, testes, heart, kidney, immune system |

Carcinogenicity

| Component | ACGIH | IARC | NTP | OSHA | Other |
|--------------------|----------------|----------------|----------------|----------------|----------------|
| 1-Tetradecene | not applicable | not applicable | not applicable | not applicable | not applicable |
| D-Limonene | not applicable | not applicable | not applicable | not applicable | not applicable |
| Tallamide DEA | not applicable | not applicable | not applicable | not applicable | not applicable |
| Cocamide DEA | not applicable | Group 2B | not applicable | not applicable | not applicable |
| 2-Ethyl-1-dodecene | not applicable | not applicable | not applicable | not applicable | not applicable |
| 2-Hexyl-1-octene | not applicable | not applicable | not applicable | not applicable | not applicable |
| 2-Butyl-1-decene | not applicable | not applicable | not applicable | not applicable | not applicable |
| Diethanolamine | A3 | Group 2B | not applicable | X | not applicable |

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

| Component | Toxicity to Algae | Toxicity to Fish | Microtox | Water Flea | log Pow |
|--------------------|--|--|---|--|---------|
| 1-Tetradecene | EC50 22 - 24 mg/L Pseudokirchneriella subcapitata 96 h | LC50 1 - 3.2 mg/L Brachydanio rerio 96 h LC50 10.0 - 32.0 mg/L Poecilia reticulata 96 h LC50 = 0.39 mg/L Oncorhynchus mykiss 96 h LC50 = 1.06 mg/L Pimephales promelas 96 h | EC50 > 10000 mg/L 6 h | 0.68: 96 h Daphnia magna mg/L LC50 0.74: 48 h Daphnia magna mg/L EC50 | N/A |
| D-Limonene | no data available | LC50 0.619 - 0.796 mg/L Pimephales promelas 96 h LC50 = 35 mg/L Oncorhynchus mykiss 96 h | no data available | no data available | N/A |
| Tallamide DEA | no data available | no data available | no data available | no data available | N/A |
| Cocamide DEA | no data available | LC50 = 3.6 mg/L Brachydanio rerio 96 h | EC50 = 6000 mg/L 16 h | 4.2: 24 h Daphnia magna mg/L EC50 | N/A |
| 2-Ethyl-1-dodecene | no data available | no data available | no data available | no data available | N/A |
| 2-Hexyl-1-octene | no data available | no data available | no data available | no data available | N/A |
| 2-Butyl-1-decene | no data available | no data available | no data available | no data available | N/A |
| Diethanolamine | EC50 2.1 - 2.3 mg/L Pseudokirchneriella subcapitata 96 h EC50 = 7.8 mg/L Desmodesmus subspicatus 72 h | LC50 1200 - 1580 mg/L Pimephales promelas 96 h LC50 4460 - 4980 mg/L Pimephales promelas 96 h LC50 600 - 1000 mg/L Lepomis macrochirus 96 h | EC50 = 73 mg/L 5 min EC50 > 16 mg/L 16 h | 55: 48 h Daphnia magna mg/L EC50 | -2.18 |

Persistence and Degradability No information available.
 Bioaccumulation No information available.
 Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
 Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT
 Proper Shipping Name TERPENE HYDROCARBONS, N.O.S.
 Hazard Class 3
 UN-No UN2319
 Packing Group III
 Description UN2319, TERPENE HYDROCARBONS, N.O.S., 3, PG III (<119 gal Not DOT Regulated - Combustible exception 173.150(f))

TDG Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

Inventories
 TSCA Complies
 DSL Complies

U.S. Federal Regulations
 SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Component | CAS-No | Weight % | SARA 313 - Threshold Values |
|----------------|----------|----------|-----------------------------|
| Diethanolamine | 111-42-2 | 0.1-1 | 1.0 |

SARA 311/312 Hazardous Categorization

| Acute Health Hazard | Chronic Health Hazard | Fire Hazard | Sudden Release of Pressure Hazard | Reactive Hazard |
|---------------------|-----------------------|-------------|-----------------------------------|-----------------|
| | | | | |

| | | | | |
|-----|-----|-----|----|----|
| Yes | Yes | Yes | No | No |
|-----|-----|-----|----|----|

CERCLA

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|--------------------|--------------------------|----------------|
| 1-Tetradecene | Not applicable | Not applicable |
| D-Limonene | Not applicable | Not applicable |
| Tallamide DEA | Not applicable | Not applicable |
| Cocamide DEA | Not applicable | Not applicable |
| 2-Ethyl-1-dodecene | Not applicable | Not applicable |
| 2-Hexyl-1-octene | Not applicable | Not applicable |
| 2-Butyl-1-decene | Not applicable | Not applicable |
| Diethanolamine | 100 lb | Not applicable |

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

B3 Combustible liquid D2A Very toxic materials D2B Toxic materials



16. OTHER INFORMATION

| | |
|---------------------|---------------------------|
| Prepared By | Adrienne McKee |
| Supersedes Date | 02/24/2012 |
| Issuing Date | 04/21/2014 |
| Reason for Revision | No information available. |
| Glossary | No information available. |
| List of References. | No information available. |

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