

SECTION 1: Identification

1.1. Identification

Product name : CitriLow

1.2. Recommended use

No additional information available

1.3. Supplier

Safe Foods Chemical Innovations
1501 East 8th Street
North Little Rock, AR, 72114
T 501-758-8500 - F 501-663-8952

1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral), Category 4

Harmful if swallowed.

Skin corrosion/irritation, Category 1

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation, Category 1

Causes serious eye damage.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

: Danger

Hazard statements (GHS US) :

: Harmful if swallowed.

Causes severe skin burns and eye damage.

Causes serious eye damage.

Precautionary statements (GHS US) :

: Do not breathe dust/fume/gas/mist/vapours/spray.

Wash hands, forearms and face thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center or doctor if you feel unwell.

If swallowed: rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center or doctor.

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

Rinse mouth.

Wash contaminated clothing before reuse.

Store locked up.

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Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

100% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

69.2% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

| Name | Product identifier | % |
|-------------------|--------------------|---------|
| Hydrogen chloride | CAS-No.: 7647-01-0 | 25 – 50 |
| Citric acid | CAS-No.: 77-92-9 | 1 – 5 |

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact : Burns.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

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Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Store locked up.

Packaging materials : Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Name | USA - ACGIH - Occupational Exposure Limits | USA - OSHA - Occupational Exposure Limits | USA - NIOSH - Occupational Exposure Limits |
|-------------------------------|--|---|--|
| Hydrogen chloride (7647-01-0) | - | PEL C: 7 mg/m ³ 5ppm | - |

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8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

| | |
|----------------------------------|--|
| Hand protection: | Protective gloves |
| Eye protection: | Safety glasses |
| Skin and body protection: | Wear suitable protective clothing |
| Respiratory protection: | In case of insufficient ventilation, wear suitable respiratory equipment |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Colour : clear light yellow
Odour : Sweet Pungent
Odour threshold : No data available
pH : 0 – 0.7
Melting point : Not applicable
Freezing point : No data available
Boiling point : > 100 °C
Flash point : > 200 °F
Relative evaporation rate : > 1
(butylacetate=1)
Flammability (solid, gas) : Not applicable.
Vapour pressure : No data available
Relative vapour density at 20°C : No data available
Relative density : No data available
Relative density of saturated gas/air mixture : 9 lbs/gal @ 77oF
Solubility : Dispersible.
Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive limits : No data available
Explosive properties : No data available
Oxidising properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| Name | LD50 Oral | LD50 Dermal | LC50 Inhalation | ATE (US) |
|-------------------------------|---|------------------------------|-----------------|---|
| Citrilow | | | | Oral: 772.727 mg/kg bodyweight |
| Hydrogen chloride (7647-01-0) | 238 mg/kg, rat | > 5010 mg/kg, rabbit | 8.3 mg/l, rat | Oral: 238 mg/kg bodyweight Vapours: 8.3 mg/l/4h Dust, mist: 8.3 mg/l/4h |
| Citric acid (77-92-9) | 11700 mg/kg bodyweight, rat 5400 mg/kg bodyweight, mouse | > 2000 mg/kg bodyweight, rat | | Oral: 5400 mg/kg bodyweight |

Skin corrosion/irritation : Causes severe skin burns.
pH: 0 – 0.7
Serious eye damage/irritation : Causes serious eye damage.
pH: 0 – 0.7
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Hydrogen chloride (7647-01-0)

| | |
|------------|----------------------|
| IARC group | 3 - Not classifiable |
|------------|----------------------|

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

| Name | LOAEL | LOAEC | NOAEL |
|-----------------------|--|-------|--|
| Citric acid (77-92-9) | Oral: 8000 mg/kg bodyweight, rat, 90 days | - | Oral: 4000 mg/kg bodyweight, rat, 90 days |

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

| Name | Fish | Crustacea | Other Aquatic Organisms |
|-------------------------------|---------------------------|---------------------|-------------------------------|
| Hydrogen chloride (7647-01-0) | LC50 [1]: 3.25 – 3.5 mg/l | EC50 [1]: 4.92 mg/l | EC50 72h Algae [1]: 0.73 mg/l |
| Citric acid (77-92-9) | LC50 [1]: 440 – 760 mg/l | - | EC50 [1]: > 50 mg/l |

12.2. Persistence and degradability

| Name | Persistence and degradability |
|-------------------------------|--|
| Citrilow | Not rapidly degradable |
| Hydrogen chloride (7647-01-0) | Biodegradability: not applicable. |
| Citric acid (77-92-9) | Biodegradable in the soil, Readily biodegradable in water. |

12.3. Bioaccumulative potential

| Name | Bioaccumulative Potential |
|-------------------------------|--|
| Hydrogen chloride (7647-01-0) | Does not contain bioaccumulative component(s). |
| Citric acid (77-92-9) | Not bioaccumulative. |

12.4. Mobility in soil

| Name | Soil Ecology |
|-------------------------------|---|
| Hydrogen chloride (7647-01-0) | No (test) data on mobility of the component(s) available. May be harmful to plant growth, blooming and fruit formation. |
| Citric acid (77-92-9) | Highly mobile in soil. |

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.





SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

| DOT | TDG | IMDG | IATA |
|------------------------|--------|------|------|
| 14.1. UN number | | | |
| 1760 | UN1760 | 1760 | 1760 |

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| DOT | TDG | IMDG | IATA |
|---|---|--|---|
| 14.2. Proper Shipping Name | | | |
| Corrosive liquids, n.o.s. (HCl MIXTURE) | CORROSIVE LIQUID, N.O.S. (HCl MIXTURE) | CORROSIVE LIQUID, N.O.S. (HCl MIXTURE) | Corrosive liquid, n.o.s. (HCl MIXTURE) |
| 14.3. Transport hazard class(es) | | | |
| 8 | 8 | 8 | 8 |
|  |  |  |  |
| 14.4. Packing group | | | |
| II | II | II | II |
| 14.5. Environmental hazards | | | |
| Dangerous for the environment: No | Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No | Dangerous for the environment: No |
| No supplementary information available | | | |

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

| Name | CAS-No. | Listing | Commercial status | Flags |
|-------------------|-----------|-------------|-------------------|-------|
| Hydrogen chloride | 7647-01-0 | Not present | - | |
| Citric acid | 77-92-9 | Not present | - | |

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Version : 4.0
Issue date : 9/6/2024
Revision date : 10/1/2024
Supersedes : 9/10/2024

Hazard Rating
Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 0 Minimal Hazard - Materials that will not burn

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Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Personal protection : X - Special handling directions

Safety Data Sheet (SDS), USA - SFCI

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.