

SECTION 1: Product and company identification

Product name : Citra Fresh
Product code : 0377
Company : Total Solutions
P.O. Box 240014
Milwaukee, WI 53224 - USA
T 800-743-6417
athea.com
Contact: Technical Department
Emergency number : Chemtrec: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Flam. Liq. 4 H227
Skin Irrit. 2 H315
Skin Sens. 1 H317
Asp. Tox. 1 H304

2.2. Label elements

GHS US labelling
Hazard pictograms (GHS US)



Signal word (GHS US) : Danger
Hazard statements (GHS US) : Combustible liquid
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause an allergic skin reaction.
Precautionary statements (GHS US) : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Avoid breathing mist, spray.
Wash thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace.
Wear protective clothing, eye protection, face protection.
If swallowed: Immediately call a POISON CENTER, a doctor.
If on skin: Wash with plenty of soap and water.
Do NOT induce vomiting.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use Water spray, ABC-powder, dry extinguishing powder, foam to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to comply with local/regional/national/international regulations..

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
d-Limonene (Solvent)	(CAS-No.) 5989-27-5	15 – 30	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304

All hazardous chemicals, as determined by 29 CFR 1910.1200 have been listed. A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both 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	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: Risk of lung oedema.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Combustible liquid.
Explosion hazard	: No direct explosion hazard.
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

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

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Avoid breathing 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	: Absorb spilled material with sand or earth. 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. Notify authorities if product enters sewers or public waters.
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

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|-----------------------------------|---|
| 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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. |
| Hygiene measures | : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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 in a well-ventilated place. Keep cool. 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

d-Limonene (5989-27-5)

Not applicable

8.2. Exposure controls

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|----------------------------------|--|
| Appropriate engineering controls | : Ensure good ventilation of the work station. |
| Personal protective equipment | : Gloves. Safety glasses. Protective clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |



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|---------------------------------|---|
| 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. |
| Environmental exposure controls | : Avoid release to the environment. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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|---|------------------------|
| Physical state | : Liquid |
| Appearance | : clear, orange liquid |
| Odour | : Citrus scent |
| Odour threshold | : No data available |
| pH | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : 73 °C |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Flammability | : No data available |
| Explosive limits | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Vapour pressure | : No data available |
| Relative density | : No data available |
| Relative vapour density at 20°C | : No data available |
| Density | : 0.786 g/ml |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Partition coefficient n-octanol/water (Log Kow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity | : No data available |
| Viscosity, kinematic | : < 20 cSt |
| Viscosity, dynamic | : No data available |
| VOC content | : < 16 |

SECTION 10: Stability and reactivity

10.1. Reactivity

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

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

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

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 : Not classified

d-Limonene (5989-27-5)

LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Read-across, Dermal, 7 day(s))

Skin corrosion/irritation : Causes skin irritation.
 Serious eye damage/irritation : Not classified
 Respiratory or skin sensitisation : May cause an allergic skin reaction.
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified

d-Limonene (5989-27-5)

IARC group	3 - Not classifiable
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Reproductive toxicity : Not classified
 STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.
 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 : Irritation. May cause an allergic skin reaction.
 Symptoms/effects after eye contact : None under normal conditions.
 Symptoms/effects after ingestion : Risk of lung oedema.

SECTION 12: Ecological information

12.1. Toxicity

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

d-Limonene (5989-27-5)

LC50 - Fish [1]	720 µg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 - Crustacea [1]	0.307 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP)
LC50 - Fish [2]	702 µg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [2]	0.51 mg/l Test organisms (species): Daphnia magna

12.2. Persistence and degradability

d-Limonene (5989-27-5)	
Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O ₂ /g substance

12.3. Bioaccumulative potential

d-Limonene (5989-27-5)	
BCF - Fish [1]	864.8 l/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C)
Bioaccumulative potential	Potential for bioaccumulation (4 ≤ Log Kow ≤ 5).

SECTION 13: Disposal considerations

13.1. Waste treatment 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

Department of Transportation (DOT)

Transport document description (DOT)	: NA1993 Combustible liquid, n.o.s. Terpene Hydrocarbons, Comb Liq, III
UN-No.(DOT)	: NA1993
Proper Shipping Name (DOT)	: Combustible liquid, n.o.s. Terpene Hydrocarbons
Class (DOT)	: Comb Liq - Combustible liquid
Packing group (DOT)	: III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Symbols	: D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	: 148,IB3,T1,TP1
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A

Additional information

Other information	: This product is classified as a combustible liquid and is exempt from the U.S. DOT's Hazardous Materials Regulations when shipped in non-bulk packages. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may be required.
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ADR

No additional information available

Transport by sea

UN-No. (IMDG)	: 1993
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, N.O.S.
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: III - substances presenting low danger

Air transport

UN-No. (IATA)	: 1993
Proper Shipping Name (IATA)	: Flammable liquid, n.o.s.
Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: III - Low danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Citra Fresh

Safety Data Sheet

TOTAL
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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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.

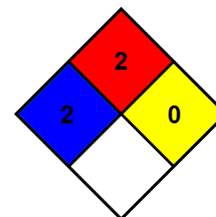
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Prepared by: Technical Department

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. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such venders or users assume all risks associated with the use of this material.