

SECTION 1: Product and company identification

Product name : Orange Drain Cleaner
Use of the substance/mixture : Drain opener
Product code : 0379
Company : Total Solutions
P.O. Box 240014
Milwaukee, WI 53224 - USA
T (414) 354-6417
Emergency number : Chemtrec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 3 H226
Skin Irrit. 2 H315
Eye Irrit. 2 H319
Skin Sens. 1 H317
Asp. Tox. 1 H304

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS02



GHS07



GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation

Precautionary statements (GHS-US) : Keep away from heat, open flames, sparks. - No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment
Use explosion-proof electrical, lighting equipment
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing vapors, spray.
Wash thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace
Wear eye protection, protective clothing, protective gloves.
If swallowed: Immediately call a POISON CENTER, a doctor
If on skin: Wash with plenty of water
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Specific treatment (see First aid measures on this label)
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Wash contaminated clothing before reuse.
In case of fire: Use foam, carbon dioxide (CO2), dry extinguishing powder 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

Full text of H-phrases: see section 16

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
(+)-limonene	(CAS-No.) 5989-27-5	45-55	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS-No.) 64742-47-8	40-50	Flam. Liq. 4, H227 Asp. Tox. 1, H304
Linear Alcohol Ethoxylate	(CAS-No.) 34398-01-1	1-5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

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 : If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Take off immediately all contaminated clothing and wash it before reuse. Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Immediately call a poison center or doctor/physician. Rinse mouth with water.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.
- Symptoms/effects after inhalation : None under normal use.
- Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. Risk of aspiration pneumonia. Nausea. Cramps/uncontrolled muscular contractions. Diarrhoea.
- Chronic symptoms : Cracking of the skin. Dry skin.

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 : Foam. Carbon dioxide. Dry chemical powder.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor.

Reactivity : Upon combustion: CO and CO₂ are formed.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No flames, no sparks. Eliminate all sources of ignition.

6.1.1. For non-emergency personnel

Protective equipment : Protective goggles. Gloves. Protective clothing.

Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

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Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain released product, pump into suitable containers.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Handle and open the container with care. Keep away from sources of ignition - No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Hygiene measures : Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep container tightly closed.

Incompatible products : Oxidizing agent.

Incompatible materials : Sources of ignition.

Storage area : Store away from heat. Store in a cool area. Store in a dry area. Store in a well-ventilated place.

Special rules on packaging : Keep only in original container. meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

(+)-limonene (5989-27-5)

Not applicable

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)

Not applicable

Linear Alcohol Ethoxylate (34398-01-1)

Not applicable

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Safety glasses. Protective goggles. Protective clothing.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : clear, red-orange liquid.
Odor : Citrus fruits
Odor threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : 121 °F Closed Cup
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Explosion limits : No data available

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Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 0.812 g/ml
Solubility	: Emulsifies in water.
Log Pow	: No data available
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	: > 90 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO2 are formed.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No additional information available

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

(+)-limonene (5989-27-5)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Read-across)
LD50 dermal rabbit	> 5000 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Weight of evidence)
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit, Literature)
Linear Alcohol Ethoxylate (34398-01-1)	
LD50 oral rat	> 1400 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
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	: May be fatal if swallowed and enters airways.
Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: Causes skin irritation. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of aspiration pneumonia. Nausea. Cramps/uncontrolled muscular contractions. Diarrhoea.
Chronic symptoms	: Cracking of the skin. Dry skin.

Likely routes of exposure : Skin and eye contact

SECTION 12: Ecological information

12.1. Toxicity

(+)-limonene (5989-27-5)	
LC50 fish 1	720 µg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	0.36 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
LC50 fish 1	> 100 mg/l (Pisces)
EC50 Daphnia 1	> 100 mg/l (Invertebrata)
Linear Alcohol Ethoxylate (34398-01-1)	
LC50 fish 1	< 10 mg/l
EC50 Daphnia 1	< 10 mg/l
ErC50 (algae)	< 10 mg/l

12.2. Persistence and degradability

(+)-limonene (5989-27-5)	
Persistence and degradability	Readily biodegradable in water.
ThOD	3.29 g O ₂ /g substance
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

(+)-limonene (5989-27-5)	
BCF fish 1	864.8 - 1022 (Pisces, QSAR, Fresh weight)
Log Pow	4.38 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 37 °C)
Bioaccumulative potential	Potential for bioaccumulation (4 Log Kow 5).
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Log Pow	6 - 8.2
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

Transport document description : UN1993 Flammable liquids, n.o.s. (Aliphatic Hydrocarbons, Terpene Hydrocarbons), 3, III
 UN-No.(DOT) : UN1993
 Proper Shipping Name (DOT) : Flammable liquids, n.o.s.
 Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
 Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger
 DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
 DOT Packaging Bulk (49 CFR 173.xxx) : 242
 DOT Symbols : G - Identifies PSN requiring a technical name
 DOT Special Provisions (49 CFR 172.102) : B1,B52,IB3,T4,TP1,TP29

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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 : When transported by ground in non-bulk containers, this product utilizes the exception found under 49 CFR 173.150. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may be required.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not 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.

Linear Alcohol Ethoxylate (34398-01-1)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard



WARNING

This product can expose you to benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

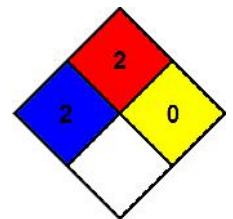
Full text of H-phrases:

H226	Flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage

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

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