

SAFETY DATA SHEET

Date issued : 01/28/2015

SDS number : OSO

Date revised : 12/17/2025

Revision number : 2

Orange Solv

1. Identification

Product code: OSO

Product identifier: Orange Solv

Product description: Natural Citrus Solvents

Chemical family: Citrus Terpenes

Relevant identified uses: Cleaner/degreaser for heavy industrial soils.

Emergency telephone number (24 hour)

VelocityEHS (Medical and Transportation): 800-255-3924

POISON CONTROL CENTER (Medical): 800-222-1222

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Skin Irritation, Category 2

Skin Sensitization, Category 1

Serious Eye Damage, Category 1

Environmental hazards:

Aquatic Toxicity, Category 1

Physical hazards:

Flammable Liquids, Category 3

Label elements



Exclamation
mark



Corrosion



Flame



Environment

Signal word: DANGER

Hazard statement(s)

H318: Causes serious eye damage.

H315: Causes skin irritation.

H303: May be harmful if swallowed.

H317: May cause an allergic skin reaction.

H226: Flammable liquid and vapour.

H400: Very toxic to aquatic life.

Precautionary statement(s)

Prevention:

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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

P240: Ground and bond container and receiving equipment.

P242: Use non-sparking tools.

P261: Avoid breathing fume, gas, mist, vapors, or spray.

P262: Do not get in eyes, on skin, or on clothing.

P270: Do not eat, drink or smoke when using this product.

P264: Wash hands thoroughly after handling.

P233: Keep container tightly closed.

P273: Avoid release to the environment.

P102: Keep out of reach of children.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.
P302+P352: IF ON SKIN: Wash with plenty of soap and water
P362: Take off contaminated clothing.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P370+P378: In case of fire: Use dry chemical, foam or water mist to extinguish.
P391: Collect spillage.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Disposal:

P501: Dispose of contents/container according to all local, state and Federal regulations.

Emergency overview

Physical appearance: Orange Liquid

Immediate concerns: Severe eye irritant and may cause permanent eye damage. Skin irritant.

Potential health effects

Eye: Irritating, and may injure eye tissue if not removed promptly.

Skin: Contact may cause moderate to severe irritation.

Skin absorption: Not Established

Ingestion: Harmful if swallowed.

Inhalation: High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches)

Reproductive toxicity

Reproductive toxicity: None known.

Teratogenic effects: None known.

Carcinogenicity: Contains an ingredient listed under IARC Group 3 status.

Mutagenicity: None known.

Routes of entry: Eye, skin, ingestion.

Irritancy: Yes

Sensitization: May cause skin sensitization with contact.

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
Limonene	65 - 75	5989-27-5
Butoxyethanol	20 - 25	111-76-2
Nonoxynol	5 - 10	127087-87-0
Ethanolamine	0 - 5	141-43-5
Dye	0 - 0.1	TS

4. First-aid measures

Eye: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

Skin: Remove contaminated clothing. Immediately flush with water followed by washing with mild soap. Seek medical attention.

Ingestion: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

Inhalation: Remove victim to fresh air and monitor. Seek medical advice if irritation develops or persists.

Most important symptoms and effects, both acute and delayed

Eye: Severe burning sensation, tearing, redness, swelling.

Skin: Burning sensation, redness.

Skin absorption: Not Established

Ingestion: Irritation of mouth, throat, along with upset stomach, vomiting.

Inhalation: Headache, dizziness, nausea.

Acute effects: Corrosive to eyes. Causes moderate to severe skin irritation. Harmful if swallowed.

Chronic effects: Not Established

5. Fire-fighting measures

Flammable class: II (100-140F)

General hazard: Combustible Liquid

Suitable extinguishing media: Use Dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

Hazardous combustion products: Carbon monoxide from combustion

Explosion hazards: Fire exposed containers may burst due to increased pressure from heat.

Fire fighting procedures: Keep fire exposed containers cool with water stream or mist.

Fire fighting equipment: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with full face-piece operated in positive pressure mode.

Sensitivity to static discharge: Not Established

6. Accidental release measures

Small spill: Avoid walking in product. Wipe up or otherwise flush small spills to sanitary sewer.

Large spill: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

Environmental precautions

Water spill: Avoid discharges into open waterways and notify your local emergency services if this occurs.

Land spill: Avoid discharge to soil.

Air spill: No data available. Contact Env. Dept.

General procedures: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.

Release notes: Eliminate all ignition sources. Ventilate area well.

Special protective equipment: Eye protection, rubber gloves, rubber boots to protect feet.

7. Handling and storage

General procedures: Store away from excessive heat, spark or open flame. Store at temperatures below 140F. Keep container closed until used. Do not contaminate water, food, or feed by storage or disposal.

Precautions for safe handling: Wear chemical resistant rubber or neoprene gloves and eye safety goggles/full face shield when handling.

Conditions for safe storage: Store in closed container in an area inaccessible to children.

Storage temperature: Store at ambient temperatures.

Storage pressure: Store at ambient atmospheric pressure.

8. Exposure controls/personal protection

Exposure controls

Control parameters				
	Occupational exposure limit values			
Chemical name	Type		ppm	mg/m³
Limonene	OSHA PEL	TWA	[1]	[1]
	ACGIH TLV	TWA	[1]	[1]
	Supplier OEL	TWA	30	
Butoxyethanol	OSHA PEL	TWA	50	240
	ACGIH TLV	TWA	20	97
	Supplier OEL	TWA	NL	NL
		STEL	NL	NL
Ethanolamine	OSHA PEL	TWA	3	6
	ACGIH TLV	TWA	3	7.5
		STEL	6	15
	Supplier OEL	TWA	NL	NL
		STEL	NL	NL
Footnotes:				
1. Not Established				

Appropriate engineering controls: Provide mechanical ventilation when used in confined areas, or areas with poor ventilation.

Individual protection measures, such as personal protective equipment

Eye / face protection: Chemical splash goggles.

Skin protection - hand protection: Rubber or other chemical resistant gloves.

Respiratory protection: A respirator is not needed under normal and intended conditions of product use.

Skin protection - other: Chemical resistant outerwear (tyvek) if contact with spray or mist is anticipated.

Occupational hygiene practices: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. Physical and chemical properties

Physical state: Liquid

Color: Orange

Odor: Citrus

Odor threshold: Not Established

pH: NA = Not Applicable

Freezing point: Not Available

Initial boiling point and boiling range: 176°C (349°F) to 177°C (351°F)

Flash point: 48°C (118°F) Tag Closed Cup (TCC)

Evaporation rate (n-butyl acetate = 1): (Water =1) <1.0

Lower explosion limit / flammability limit: 0.7

Upper explosion limit / flammability limit: 6.0

Vapor pressure: < 2 mm Hg at 20°C (68°F)

Relative vapor density: ~ 4.7 Air = 1

Density: 7.26 at 20°C (68°F)

Relative density: 0.867 grams/ml. at 20°C (68°F)

Solubility: dispersable

Auto-ignition temperature: Not Established

Decomposition temperature: Not Available

Viscosity: Water thin.

Percent volatiles: >90

VOC content: 91.47 % by weight

10. Stability and reactivity

Reactivity: Stable

Dangerous polymerization: None known.

Chemical stability: Stable under normal storage and use conditions.

Conditions to avoid: Heat, flames and sparks.

Hazardous decomposition products: Not Established

Incompatible materials: Strong oxidizers

11. Toxicological information

Acute toxicity

Chemical name	LD ₅₀ (oral) mg/kg(rat)	LD ₅₀ (dermal) mg/kg(rabbit)	LC ₅₀ (inhalation) mg/l
Butoxyethanol	1300 mg/kg (rat)	> 2000 mg/kg (rabbit)	> 3.1 mg/l
Ethanolamine	1089 mg/kg (rat)	2504 mg/kg (rat)	~ 1.48 mg/l

Acute dermal toxicity LD₅₀: Not Established

Acute oral toxicity LD₅₀: Not Established

Acute inhalation toxicity LC₅₀: Not Established

Serious eye damage / irritation: Irritant

Respiratory or skin sensitization: May cause sensitization by skin contact.

Germ cell mutagenicity: No known significant effects or critical hazards.

Carcinogenicity

Chemical name	NTP	IARC	OSHA
Limonene	No listed substance	Group 3 - Not classifiable as to its carcinogenicity to Humans	No listed substance
Butoxyethanol		Group 3 - Not classifiable as to its carcinogenicity to Humans	

IARC:

The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of d-Limonene in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans).

Reproductive toxicity: No known significant effects or critical hazards.

Specific Target Organ Toxicity - single exposure: Not Established

12. Ecological information

Ecotoxicological information: Not Established
Aquatic toxicity, both acute and chronic: Not Established
Persistence and degradability: Not Established
Bioaccumulative potential: Not Established
Environmental data: Toxic to aquatic life.

13. Disposal considerations

Disposal methods: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. If discarded, this material and its containers should be treated as hazardous waste based on the characteristics of ignitability as defined under federal RCRA regulations (40 CFR 261). Consult local authorities for disposal into public sewer.
For large spills: Consult with local and state authorities for large volume disposal.
Product disposal: Any method in accordance with local, state, and federal laws. Best method is to recycle or reuse for intended purpose.
Empty container: Rinse container with clear water. Offer container for recycling, or dispose of in trash.
RCRA/EPA waste information: Ignitability

14. Transport information

USA Department of Transport Regulations (DOT)

UN proper shipping name: Cleaning Compound, not regulated (for US domestic shipment only)
DOT other shipping information: Certain shipping modes and packaging sizes may have exceptions from the transport regulations. The classifications/information provided above may not reflect applicable exceptions. Contact the manufacturer for more specific information on the proper shipping of this material.

ICAO - air

UN proper shipping name: Not Approved

IMDG - sea

UN proper shipping name:

Flammable Liquid, n.o.s.

Technical name: Terpene Hydrocarbon Solution

UN number: 1993

Transport hazard class(es): 3

Packing group, if applicable: III

EmS: 3-07

Environmental hazards - marine pollutant: Yes

Placards: Flammable

Hazard label: Flammable, Marine Pollutant

Note: Above information for containers greater than 5 gallons. Consult manufacturer for container shipping information of less than 5 gallons.

15. Regulatory information

UNITED STATES

SARA Section 311/312 Hazard Categories

311/312 Health hazards: Health Hazard - Acute; Fire Hazard

313 reportable ingredients: 2-butoxyethanol 111-76-2 (Category: N230 Certain Glycol Ethers)

EPCRA Section 313 Toxic Chemicals

Chemical name	% w/w	CAS No.	Comments
Butoxyethanol	20 - 25	111-76-2	N230 Certain Glycol Ethers
Nonoxynol	5 - 10	127087-87-0	N535 Nonylphenol Ethoxylates

EPCRA Section 302 Extremely Hazardous Substances

EPCRA Status: No listed substance

CERCLA Hazardous Substances and Reportable Quantities (RQ)

CERCLA regulatory: No products were found.

CERCLA rq: Not Established

TSCA (The Toxic Substances Control Act)

TSCA regulatory: All ingredients are listed on the TSCA Chemical Inventory.

States with special requirements

Chemical name	Requirements
Limonene	Pennsylvania Right to Know Substance New Jersey Right To Know Substance
Butoxyethanol	Massachusetts Right to Know Substance Pennsylvania Right to Know Substance New Jersey Right To Know Substance
Nonoxynol	Massachusetts Right to Know Substance New Jersey Right To Know Substance Pennsylvania Right to Know Substance
Ethanolamine	Massachusetts Right to Know Substance New Jersey Right To Know Substance New York Right to Know Substance Pennsylvania Right to Know Substance

California Proposition 65: No listed substance

Carcinogen:

The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of d-Limonene in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans).

16. Other information

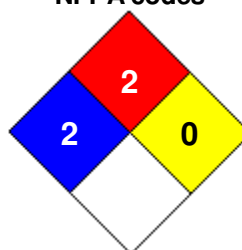
Prepared by: Regulatory Affairs Department **Date revised:** 12/17/2025

Revision summary: This SDS replaces the 11/19/2021 SDS. Revised: **Section 2:** Classification of the substance or mixture, Label elements, Precautionary statement(s).

HMIS rating

Health	*	2
Flammability		2
Physical hazard		0
Personal protection	D	

NFPA codes



Manufacturer disclaimer: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.