

SAFETY DATA SHEET

Date Prepared : 1/28/2015

SDS No : OSO

Orange Solv

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Orange Solv
GENERAL USE: Cleaner/degreaser for heavy industrial soils.
PRODUCT DESCRIPTION: Natural Citrus Solvents
PRODUCT CODE: OSO
CHEMICAL FAMILY: Citrus Terpenes

MANUFACTURER

MISCO Products Corporation
1048 Stinson Drive
Reading, PA 19605

Emergency Phone: 610-926-4106

Customer Service: 800-548-4568

Transportation: 800-548-4568

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEM-TEL (Medical and Transportation): 800-255-3924

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

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 1
Skin Irritation, Category 2
Skin Sensitization, Category 1

Environmental:

Aquatic Toxicity, Category 1

Physical:

Flammable Liquids, Category 3

GHS LABEL



Exclamation
mark



Corrosion



Flame



Environment

SIGNAL WORD: DANGER

HAZARD STATEMENTS

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/sparks/open flames/hot surfaces. – No smoking.
P240: Ground/bond container and receiving equipment.
P242: Use only non-sparking tools.

P261: Avoid breathing mist/vapours/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 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 and wash before reuse.
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, alcohol-resistant foam for extinction.
P391: Collect spillage.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Disposal:

P501: Dispose of contents/container in accordance with 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

EYES: 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

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 sensitisation with contact.

PHYSICAL HAZARDS: Combustible material.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
d-Limonene	65 - 75	5989-27-5
Ethylene glycol butyl ether	20 - 25	111-76-2
Nonylphenol Ethoxylate	5 - 10	9016-45-9
Monoethanolamine	0 - 5	141-43-5
Dye	0 - 0.1	N/A

4. FIRST AID MEASURES

EYES: 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 advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

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

SKIN: Burning sensation, redness.

SKIN ABSORPTION: Not Established

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

INHALATION: Headache, dizziness, nausea.

ACUTE TOXICITY: 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

EXTINGUISHING MEDIA: Use alcohol foam, 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.

SENSITIVE 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.

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.

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

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 GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
d-Limonene	TWA	[1]	[1]	[1]	[1]	30	
Ethylene glycol butyl ether	TWA	50	240	20	97	NL	NL
	STEL					NL	NL
Monoethanolamine	TWA	3	6	3	7.5	NL	NL
	STEL			6	15	NL	NL

Footnotes:
1. Not Established

ENGINEERING CONTROLS: Provide mechanical ventilation when used in confined areas, or areas with poor ventilation.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles.

SKIN: Rubber or other chemical resistant gloves.

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

PROTECTIVE CLOTHING: Chemical resistant outerwear (tyvek) if contact with spray or mist is anticipated.

WORK HYGIENIC 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

ODOR: Citrus

ODOR THRESHOLD: Not Established

COLOR: Orange

pH: NA = Not Applicable

PERCENT VOLATILE: >90

FLASH POINT AND METHOD: 48°C (118°F) Tag Closed Cup (TCC)

FLAMMABLE LIMITS: 0.7 to 6.0

AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: < 2 mm Hg at 20°C (68°F)

VAPOR DENSITY: ~ 4.7 Air = 1

BOILING POINT: 176°C (349°F) to 177°C (351°F)

FREEZING POINT: Not Available

THERMAL DECOMPOSITION: Not Available

SOLUBILITY IN WATER: dispersable

EVAPORATION RATE: (Water =1) <1.0

DENSITY: 7.26 at 20°C (68°F)

SPECIFIC GRAVITY: 0.867 grams/ml. at 20°C (68°F)

VISCOSITY: Water thin.

(VOC): 91.470 % by weight

10. STABILITY AND REACTIVITY

REACTIVITY: Stable

HAZARDOUS POLYMERIZATION: None known.

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

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
d-Limonene	4400 mg/kg (rat)	5000 mg/kg (rabbit)	
Ethylene glycol butyl ether	1300 mg/kg (rat)	> 2000 mg/kg (rabbit)	> 3.1 mg/l
Nonylphenol Ethoxylate	16000 mg/kg (rat)	4490 mg/kg (rabbit)	
Monoethanolamine	1089 mg/kg (rat)	2504 mg/kg (rabbit)	~ 1.48 mg/l

EYES: Not Established

DERMAL LD₅₀: Not Established

SKIN ABSORPTION: Not Established

ORAL LD₅₀: Not Established

INHALATION LC₅₀: Not Established

EYE EFFECTS: Moderate to severe eye irritant.

SKIN EFFECTS: Moderate skin irritant.

CHRONIC: Not Established

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status	OSHA Status
d-Limonene	No listed substance	Group 3 - Not classifiable as to its carcinogenicity to Humans	No listed substance
Ethylene glycol butyl ether	No listed substance	Group 3 - Not classifiable as to its carcinogenicity to Humans	No listed substance

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).

IRRITATION: Irritant

SENSITIZATION: May cause sensitisation by skin contact.

NEUROTOXICITY: Central nervous system effects marked by dizziness, headache, nausea.

GENETIC EFFECTS: No known significant effects or critical hazards.

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.

TARGET ORGANS: Not Established

TERATOGENIC EFFECTS: No known significant effects or critical hazards.

MUTAGENICITY: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Toxic to aquatic life.

ECOTOXICOLOGICAL INFORMATION: Not Established

BIOACCUMULATION/ACCUMULATION: Not Established

AQUATIC TOXICITY (ACUTE): Not Established

CHEMICAL FATE INFORMATION: Not Established

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: 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

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Cleaning Compound, not regulated (for US domestic shipment only)

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.

AIR (ICAO/IATA)

SHIPPING NAME: Not Approved

VESSEL (IMO/IMDG)

SHIPPING NAME:

Flammable Liquid, n.o.s.

TECHNICAL NAME: Terpene Hydrocarbon Solution

UN/NA NUMBER: 1993

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: III

EmS: 3-07

MARINE POLLUTANT #1: Yes

PLACARDS: Flammable

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 TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health Hazard - Acute; Fire Hazard

FIRE: Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** No

313 REPORTABLE INGREDIENTS: 2-butoxyethanol 111-76-2 (Category: N230 Certain Glycol Ethers)

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Ethylene glycol butyl ether	20 - 25	111-76-2

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No listed substance

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: No products were found.

CERCLA RQ: Not Established

TSCA (TOXIC SUBSTANCE CONTROL ACT)

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

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
d-Limonene	Pennsylvania Right to Know Substance New Jersey Right To Know Substance
Ethylene glycol butyl ether	Massachusetts Right to Know Substance Pennsylvania Right to Know Substance New Jersey Right To Know Substance
Nonylphenol Ethoxylate	Massachusetts Right to Know Substance New Jersey Right To Know Substance Pennsylvania Right to Know Substance
Monoethanolamine	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

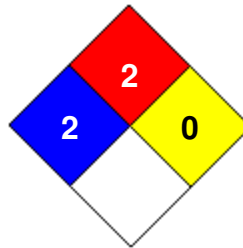
PREPARED BY: Regulatory Affairs Department

Date Prepared: 1/28/2015

HMIS RATING

HEALTH	*	2
FLAMMABILITY		2
PHYSICAL HAZARD		0
PERSONAL PROTECTION		D

NFPA CODES



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