

# SAFETY DATA SHEET

Date Prepared : 05/01/2015

SDS No : Hillyard, Inc.\_Concentrated Orange Solv

## Concentrated Orange Solv

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Concentrated Orange Solv

**GENERAL USE:** Cleaner/degreaser for heavy industrial soils.

**PRODUCT DESCRIPTION:** Natural Citrus Solvents

**CHEMICAL FAMILY:** Citrus Terpenes

#### DISTRIBUTOR

Hillyard Connecticut

127 Park Avenue

East Hartford, CT 06108

**Customer Service:** 860-646-3322

#### 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, 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**

**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**

**REPRODUCTIVE EFFECTS:** 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	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 advice 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 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

**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.

**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			
Chemical Name	Type		ppm	mg/m <sup>3</sup>
d-Limonene	OSHA PEL	TWA	[1]	[1]
	ACGIH TLV	TWA	[1]	[1]
	Supplier OEL	TWA	30	
Ethylene glycol butyl ether	OSHA PEL	TWA	50	240
	ACGIH TLV	TWA	20	97
	Supplier OEL	TWA	NL	NL
		STEL	NL	NL
Monoethanolamine	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				

**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):** 91.47 % 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 TOXICITY

Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (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

**DERMAL LD<sub>50</sub>:** Not Established

**ORAL LD<sub>50</sub>:** Not Established

**INHALATION LC<sub>50</sub>:** Not Established

**SERIOUS EYE DAMAGE/IRRITATION:** Irritant

**RESPIRATORY OR SKIN SENSITISATION:** May cause sensitization by skin contact.

**GERM CELL MUTAGENICITY:** No known significant effects or critical hazards.

### 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).

**REPRODUCTIVE TOXICITY:** No known significant effects or critical hazards.

**STOT-SINGLE EXPOSURE:** Not Established

## 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

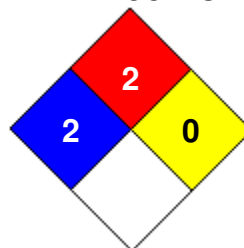
**PREPARED BY:** Regulatory Affairs Department

**Date Prepared:** 05/01/2015

### HMIS RATING

HEALTH	*	2
FLAMMABILITY		2
PHYSICAL HAZARD		0
PERSONAL PROTECTION		D

### NFPA CODES



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