SAFETY DATA SHEET

Date Prepared: 05/01/2015

SDS No: Hillyard, Inc._Orange-Solv II

Orange-Solv II

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Orange-Solv II

GENERAL USE: Light duty degreasing of oil-based soils.

PRODUCT DESCRIPTION: Citrus Cleaner

CHEMICAL FAMILY: Citrus solvent/detergent blend

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:

Skin Irritation, Category 2 Eye Corrosion, Category 1

Physical:

Flammable Liquids, Category 3

GHS LABEL



Corrosion



Flame

SIGNAL WORD: DANGER HAZARD STATEMENTS

H318: Causes serious eye damage.

H315: Causes skin irritation.

H303: May be harmful if swallowed. H226: Flammable liquid and vapour.

PRECAUTIONARY STATEMENT(S)

Prevention:

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

P264: Wash hands thoroughly after handling.

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

P234: Keep only in original packaging.

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

P233: Keep container tightly closed.

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

P332+P313: If skin irritation occurs: Get medical advice/attention.

P362: Take off contaminated clothing.

P301+P312: IF SWALLOWED: 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.

Storage:

P405: Store locked up.

P403+P235: Store in a well-ventilated place. Keep cool.

Disposal:

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

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Orange Liquid

IMMEDIATE CONCERNS: Causes irreversible eye damage and skin burns.

POTENTIAL HEALTH EFFECTS

EYES: Extremely irritating to the eyes and may cause severe damage including blindness.

SKIN: Contact may cause moderate to severe irritation.

SKIN ABSORPTION: None Expected. **INGESTION:** Harmful if swallowed.

INHALATION: Mist is irritating to nose, throat and lungs.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: None known.

CARCINOGENICITY: Not Established

MUTAGENICITY: None known.

ROUTES OF ENTRY: Eye, skin, ingestion. **WARNING CAUTION LABELS:** Corrosive

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
d-Limonene	10 - 15	5989-27-5
Fatty acids, tall-oil, potassium salts	5 - 10	61790-44-1
Nonylphenol Ethoxylate	0 - 5	9016-45-9
Ethylene glycol butyl ether	5 - 10	111-76-2
Dye	< 0.1	N/A
Water	60 - 70	7732-18-5

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, damage marked by burns.

SKIN: Burning sensation, redness.

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

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing. **ACUTE EFFECTS:** Corrosive to eyes. Causes moderate to severe skin irritation. Harmful if swallowed.

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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 ans self-contained breathing apparatus (SCBA) with full face-piece operated in positive pressure mode.

HAZARDOUS DECOMPOSITION PRODUCTS: Not Established

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Shut off any ignition sources. Avoid walking in product. Wipe up or otherwise flush small spills (less than 1 gallon) to sanitary sewer.

LARGE SPILL: Shut off all ignition sources. Ventilate area. 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:** NA = Not Applicable

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.

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: Avoid contact with skin and eyes. Wash hands before eating, drinking, smoking or using toilet facilities.

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)				
	EXPOSUF	EXPOSURE LIMITS		
Chemical Name	Туре		ppm	mg/m³
	OSHA PEL	TWA	[1]	[1]
d-Limonene	ACGIH TLV	TWA	[1]	[1]
	Supplier OEL	TWA	30	
	OSHA PEL	TWA	50	240
Ethylene glycol butyl ether	ACGIH TLV	TWA	20	97
	Own Han OF	TWA	NL	NL
	Supplier OEL	STEL	NL	NL

Footnotes:

1. Not Established

ENGINEERING CONTROLS: Use in well ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash googles and full face-shield.

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:** 12.8 to 13.8

PERCENT VOLATILE: 85+

FLASH POINT AND METHOD: ~ 51.1°C (124°F)

FLAMMABLE LIMITS: 1.0 to 6.0

AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: ~ 20 mm Hg at (68°F)

VAPOR DENSITY: > 1 Air = 1 BOILING POINT: 212° F; 100° C FREEZING POINT: 32° F; 0° C

THERMAL DECOMPOSITION: Not Available

SOLUBILITY IN WATER: Dispersable **EVAPORATION RATE:** (Water =1) 1.0

DENSITY: 8.11

SPECIFIC GRAVITY: ~ 0.972 grams/ml.

VISCOSITY: Slightly viscous. **(VOC):** 21.55 % by weight

10. STABILITY AND REACTIVITY

REACTIVITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

INCOMPATIBLE MATERIALS: Strong acids, oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

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

DERMAL LD₅₀: Not Established **ORAL LD**₅₀: Not Established

INHALATION LC50: Not Established

SERIOUS EYE DAMAGE/IRRITATION: Irritant

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:** No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Established

ECOTOXICOLOGICAL INFORMATION: This material is harmful to aquatic life.

AQUATIC TOXICITY (ACUTE): Not Established

CHEMICAL FATE INFORMATION: This product is biodegradable.

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 ignitibility 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: Small quantities (less than 1 gallon) of used material may be flushed to sanitary sewer with copious amounts of water. Larger quantities must be disposed of by a licensed disposal company.

EMPTY CONTAINER: Rinse container with clear water. Offer container for recycling, or dispose of in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

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

PLACARDS: None

LABEL: NA = Not Applicable

AIR (ICAO/IATA)

SHIPPING NAME: Contact manufacturer for more information.

VESSEL (IMO/IMDG)

SHIPPING NAME: Contact manufacturer for more information.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health - Acute

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

313 REPORTABLE INGREDIENTS: No listed substance

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Ethylene glycol butyl ether	5 - 10	111-76-2

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No listed substance

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: 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
Nonylphenol Ethoxylate	Massachusetts Right to Know Substance New Jersey Right To Know Substance Pennsylvania Right to Know Substance
Ethylene glycol butyl ether	Massachusetts Right to Know Substance Pennsylvania Right to Know Substance New Jersey Right To Know Substance

CALIFORNIA PROPOSITION 65: No listed substance

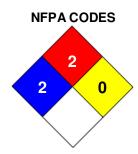
CARCINOGEN:

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



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.