SDS Date: April, 2015

Safety Data Sheet

Per GHS Standard Format

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: Recon Citrus Solvent Cleaner No. 3022 **General Use:** Cleaner/degreaser for heavy industrial soils

Product Description: Natural Citrus Solvents

Chemical Family: Citrus Terpenes

Information on the Supplier of the Safety Data Sheet

Manufactured For: Emergency Telephone Numbers: Fiberlock Technologies, Inc. CHEM TEL: (U.S.): 1-800-255-3924 150 Dascomb Road (Outside the U.S.): 813-248-0585

Andover, MA 01810 Poison Control Center (Medical): 800-222-1222

P: 800-342-3755 F: 978-475-6205

SECTION 2: HAZARDS IDENTIFICATION

Signal Word: **DANGER**









GHS Label Statements

Hazard Statements:

Causes serious eye damage.

Causes skin irritation.

May be harmful if swallowed.

May cause an allergic skin reaction.

Flammable liquid and vapor.

Very toxic to aquatic life.

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

PRECAUTIONARY STATEMENTS

Prevention: Wear protective gloves/protective clothing/eye protection/face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Use non-sparking tools. P261: Avoid breathing fumes, mist, vapors, or spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Keep container tightly closed. Avoid release to the environment. Keep out of reach of children.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of water and soap. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell. In case of fire: Use dry foam, Carbon dioxide or water spray to extinguish. Collect spillage.

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

Disposal: Dispose of contents/container in accordance with 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.

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. Warning caution labels: Irritant

Irritancy: Yes

Sensitization: May cause skin sensitization with contact.

Physical hazards: Combustible material.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight, % |
|-----------------------------|-----------|-----------|
| d-Limonene | 5989-27-5 | 65-75 |
| Ethylene glycol butyl ether | 111-76-2 | 20-25 |
| Nonylphenol Ethoxylate | 9016-45-9 | 5-10 |
| Monoethanolamine | 141-43-5 | 0-5 |
| Dye | N/A | 0-0.1 |

SECTION 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.

Inhalation

Remove victim to fresh air and monitor. Seek medical advice if irritation persists.

Ingestion

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

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

SECTION 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

SECTION 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 noncombustible 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.

SECTION 7: HANDLING AND STORAGE

General Procedures

Store away from excessive heat, spark or open flame. Store at temperatures below 140°F. 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| | | EXPOSURE LIMITS | | | | | |
|-----------------------------|------|-----------------|-------|-----------|-------|--------------|-------|
| | | OSHA PEL | | ACGIH TLV | | Supplier OEL | |
| Chemical Name | | ppm | mg/m³ | ppm | mg/m³ | ppm | mg/m³ |
| 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 |

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Odor: Citrus

Odor Threshold: Not established

Color: Orange

<u>Property</u> <u>Values</u>

pH NA = Not Applicable

Freezing point Not Available

Boiling point/boiling range 349°F (176°C) to 351°F (177°C) Flash Point 118°F (48°C) Tag Closed Cup (TCC)

Evaporation rate (Water=1) 1.0 Flammability Limits 0.7-6.0

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

Vapor density $\sim 4.7 \text{ Air} = 1$

Specific Gravity 0.867 grams/ml. at 20°C (68°F)

Water Solubility

Autoignition temperature

Thermal decomposition

Dispersable

Not Established

No data available

Percent volatile >90

Density 7.26 at 20°C (68°F)

Viscosity Water thin

VOC 91.470% by weight

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Stable

Stability

Stable under normal storage and use conditions.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Strong oxidizers

Hazardous Decomposition Products

Not Established

Hazardous Polymerization

None known

SECTION 11: TOXICOLOGICAL INFORMATION

Acute

| Chemical Name (rat) | Oral LD ₅₀ (rat) | Dermal LD ₅₀ (rabbit) | Inhalation LC ₅₀ |
|-----------------------------|-----------------------------|----------------------------------|-----------------------------|
| 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 d-Limonene | NTP Status No listed substance | IARC Status Group 3 – Not classifiable as to its carcinogenicity to Humans | OSHA Status 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 sensitization 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.

SECTION 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

SECTION 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: 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

SECTION 14: TRANSPORT INFORMATION

DOT

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.

IATA/ICAO

Shipping Name Not approved

IMDG/IMO

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.

SECTION 15: REGULATORY INFORMATION

United States

Sara Title III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories: Health – 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.

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).

States with Special Requirements

| Chemical Name d-Limonene | Requirements 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 |

SECTION 16: OTHER INFORMATION

NFPA Health Hazards 2 Flammability 2 Instability 0 Special Hazard

HMIS Health Hazards 2* Flammability 2 Physical Hazard 0 Personal Protection D

Chromic Hazard Star Legend * = Chronic Health Hazard

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD (5323) or log on to: www.epa.gov/lead

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.

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