

SR-3931 -- SPOT REMOVER

Section 1. Supplier Information

CMI Chemical Corporation
12336 Emerson Drive
Brighton, MI 48116
(248) 587-5600
Emergency Telephone: 1-800-424-9300

Section 2. Hazardous Ingredients

<u>Hazardous Component(s)</u>	<u>CAS #</u>	<u>PEL TWA</u>	<u>PEL Ceiling</u>	<u>TLV TWA</u>	<u>TLV STEL</u>	<u>MFG Limits</u>	<u>WGT %</u>
Alcohol ethoxylate, secondary	Proprietary	N/E	N/E	N/E	N/E	N/E	< 2
Aliphatic hydrocarbons	64742-88-7	5 mg/m3	N/E	5 mg/m3*	10 mg/m	100 ppm	30 - 40
d-Limonene	5989-27-5	N/E	N/E	N/E	N/E	N/E	60 - 70

N/A = Not Applicable; N/E = Not Established; * = Mists; # = Skin; ' = Respirable Dust; " = Total Dust; ^ = Vapor; ** = Fumes; C = Ceiling Limit

All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory and the Canadian Domestic Substances List (DSL), or are exempt from the listing.

Section 3. Hazards Identification

Primary Routes of Entry

Inhalation: YES
Skin: YES
Ingestion: NO

Hazardous Materials Information System (HMIS) Ratings

Health: * 1
Fire: 2
Reactivity: 0
0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe
* = Chronic Hazard

Signs of Symptoms of Exposure:

INHALATION: High vapor or mist concentrations may produce nose, throat, and respiratory irritation and may cause central nervous system (CNS) depression.

SKIN: Material is mildly irritating to the skin. Prolonged or repeated contact may cause defatting and drying of the skin, resulting in irritation and dermatitis.

EYES: Minimally irritating to the eyes. High vapor concentrations may be irritating.

INGESTION: Ingestion of this product may result in vomiting. Aspiration (breathing) of vomitus into the lungs must be avoided, as even small quantities may result in aspiration pneumonitis.

Chemical Listed as Potential Carcinogens:

NTP: NO

IARC: NO

OSHA: NO

Target Organs: Eyes, skin, respiratory system, & CNS.

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Section 4. Emergency And First Aid Procedures

INHALATION: If adverse effects such as dizziness, nausea, or irritation are noted, move person to fresh air. If not breathing, give artificial respiration. Get medical attention!

SKIN: Immediately wash skin with large amounts of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

EYES: Flush eyes immediately with water for at least 15 minutes. If irritation persists, call a physician.

INGESTION: DO NOT INDUCE VOMITING! Contact a physician immediately!

Section 5. Fire Fighting Measures

Flash Point: 112 ° F

Method Used: Tagliabue Closed Cup.

Flammable Limits in Air % by Volume: LEL: 0.7 UEL: 7.0

Extinguisher Media: Dry chemical, foam, or carbon dioxide. Use water to cool closed containers.

Special Fire Fighting Procedures: Firefighters should wear a self-contained breathing apparatus with a full facepiece operated in pressure demand or other positive pressure mode, and protective clothing.

Unusual Fire And Explosion Hazards: Product is combustible. Keep away from heat, sparks, and open flames.

Section 6. Accidental Release Measures

If material is spilled, eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or other suitable absorbent to spill area; place in closed containers for disposal.

Ventilate confined spaces. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Continue to observe precautions for volatile, combustible vapors from absorbed material.

CERCLA (Superfund) Reportable Quantity (in lbs None).

Section 7. Handling and Storage

Handling: Avoid contact with skin and eyes; wash thoroughly after handling. Avoid breathing vapor; use with adequate ventilation.

Storage: Store in a dry location at room temperature. Keep container closed and maintain all original markings and labels. Keep this container and vapors from this container away from heat, sparks, flame, and other ignition sources. Do not store near oxidizable material.

Other: CAUTION! Do not use cutting or welding torches on containers, even when empty. Containers, even those that have been emptied, will retain product residue and vapors. Do not reuse container without recycling or reconditioning. Handle empty containers as if they were full.

Section 8. Exposure Controls and Personal Protection

Respiratory Protection: Use NIOSH / MSHA approved respirator where high vapor or mist concentrations are present.

Local Exhaust: None normally required. Local exhaust may be needed under special circumstances such as poorly ventilated areas, evaporation from large surfaces, spraying, heating, etc.

Mechanical Exhaust: Mechanical ventilation should be sufficient to maintain exposure levels below exposure limits.

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Protective Gloves: Wear chemical resistant gloves.
Eye Protection: Safety glasses with side shields. Do NOT wear contact lenses. Chemical goggles and/or faceshield should be worn where splashing is possible.
Other Protection: Eye wash and safety shower should be readily available.
Hygienic Practices: Avoid contact with skin and avoid breathing vapors or mist. Do not eat, drink, or smoke while using this product. Wash up prior to eating, drinking, or using the restroom.

Section 9. Physical and Chemical Properties

Boiling Point:	319 ° F (initial)	Degree of water solubility:
Specific Gravity (H ₂ O=1):	0.81-0.83	Negligible = Less than 0.1%
Vapor Pressure (mm Hg):	< 2	Slight = 0.1% - 1%
Vapor Density (air=1)	> 4.5	Moderate = 1% - 10%
Solubility in Water:	Negligible.	Appreciable = More than 10%
Reactivity in Water:	None.	Complete = 100%
Weight per Gallon (lb/gal):	6.7 - 6.9 lbs/gal	
% Volatile by Volume:	95-97	
% Solid by Weight:	3-5	
Appearance and Odor:	Clear, colorless to pale yellow liquid with a citrus fragrance.	
Theoretical VOC: (>0.1 mm Hg @ 20 ° C)	6.6 - 6.7 lbs/gal	
Analytical VOC : (EPA method 24)	6.5 - 6.6 lbs/gal	
pH:	N/A, product is solvent based.	

Section 10. Stability and Reactivity

Stability: Stable. Hazard Polymerization: Will not occur.
Conditions to Avoid: COMBUSTIBLE! Keep from heat, sparks, or open flame.
Incompatibility (Materials to Avoid): Strong oxidizing agents, strong acids, peroxides, halogens, and iodine pentafluoride.
Hazardous Decomposition Products: Unknown organic compounds and oxides of carbon.

Section 11. Toxicological Information

Secondary alcohol ethoxylate

SIGNIFICANT DATA WITH POSSIBLE RELEVANCE TO HUMANS In studies with rabbits sustained occluded contact of undiluted surfactant can cause inflammatory changes in the lung. [20,2-19,B,F,18,D,18-091500]

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Solvent naphtha, medium aliphatic [CASRN 064742-88-7]

ACUTE TOXICITY Oral LD50 (rat) > 25 mL/kg Eye Irritation: negligible (rabbit)
Dermal LD50 (rabbit) > 4 mL/kg Skin Irritation: moderate (rabbit)
Inhalation LC50 (rat) > 700 ppm/4 hour

Other Testing: Animal data suggest that slight anemia, adaptive liver changes, and kidney toxicity (male rat nephropathy) may be caused by repeated over exposure to some similar solvents. The relevance of this effect to man is unknown.

Neurotoxicity: Repeated exposures which cause acute neurological effects may also cause long-term neurological deficits in humans.

Carcinogenicity: Animal data suggest that repeated dermal exposures that cause severe skin irritation may cause or promote skin cancer. [18,7-18,18,3,D,I-060500]

d-Limonene [CASRN 005989-27-5]

ACUTE TOXICITY

Oral LD50 (rat) > 5g/kg Eye irritation (rabbit): Severely irritating.
Dermal LD50 (rabbit) > 5 g/kg Dermal irritation (rabbit): Severely irritating.
Oral TDLO (mouse) = 67 mg/kg/39w-I:ETA
IPR TDLO (mouse) = 4800 mg/kg/8w-I:ETA

CHRONIC EFFECTS: Prolonged or repeated exposure can cause drying, defatting, and dermatitis of skin. d-limonene is NOT listed as carcinogenic by OSHA, NTP, IARC or ACGIH. FDA and WHMIS list d-limonene as GRAS -"generally recognized as safe". [5,2-3,11-031197] ; 15,3-3,11-0198

Section 12. Ecological Information

Secondary alcohol ethoxylate

ECOTOXICITY 96 hr LC50 (fathead minnow) = 4.4 - 5.5 mg/L IC50 (bacteria) > 5,000 mg/L
48 hr LC50 (daphnia magna) = 2.6 - 3.7 mg/L

FATE Theo. Oxy. Demand (ThOD) = 2.36 mg/mg BOD-Day 5 = 21-37% BOD-Day 10 = 40-51%
BOD-Day 20 = 66-71% [20,2-19,B,F,18,D,18-091500]

d-Limonene [CASRN 005989-27-5]

Ecotoxicological Information: Product may be toxic to aquatic organisms. [5,2-3,11-031197]

Section 13. Disposal Considerations

Waste Disposal Methods (Federal, State, Local):

In accordance with all federal, state and local requirements.

RCRA Hazardous Waste Number: D001

Section 14. Transport Information

Hazardous Material Description:

(Proper shipping name, hazard class, hazard ID#, packing group)

Domestic ground non-bulk: NOT REGULATED

Domestic ground bulk: COMBUSTIBLE LIQUID, N.O.S., NA1993, PG III (D-LIMONENE, PETROLEUM NAPHTHA)

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International: FLAMMABLE LIQUID, N.O.S., 3, UN1993, PG III (D-LIMONENE,
PETROLEUM NAPHTHA)

Section 15. Regulatory Information

SARA 313 Information This product contains the following chemical(s) above deminis concentrations and may be subject to reporting under section 313:
Reportable category: Certain glycol ethers, < 5 %.

Section 16. Other Information

This MSDS contains revisions in the following sections: New format

Prepared by: John A. DiCerbo, IHIT Regulatory & Safety Coordinator

Revised by: Andrew J. Thomas Chemist

The development of this Material Safety Data Sheet (MSDS) relies upon information provided to us by each of our raw material suppliers. This MSDS will be updated as changes occur to their MSDS(s).

We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damage, direct or indirect, as a result of their use.