



Clean-Solv

SECTION 1. IDENTIFICATION

Product Identifier Clean-Solv

Other Means of 13-108, 23-109-1000

Identification

Recommended Use Please refer to Product label.

Restrictions on Use None known.

Manufacturer/Supplier Recochem Inc., 850 Montee de Liesse, Montreal, QC, H4T 1P4, Compliance and Regulatory

Identifier Department, 905-878-5544, www.recochem.com

Emergency Phone No. CANUTEC, 613-996-6666, 24 Hours

SDS No. 01290027

SECTION 2. HAZARD IDENTIFICATION

Classification

Flammable liquid - Category 4; Skin irritation - Category 2; Eye irritation - Category 2A; Skin sensitization - Category 1A; Carcinogenicity - Category 2; Reproductive toxicity - Effects on or via lactation; Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 2; Aspiration hazard - Category 1

Label Elements





Signal Word: Danger

Hazard Statement(s):

Combustible liquid.

May be fatal if swallowed and enters airways.

Causes skin and eye irritation.

May cause respiratory irritation.

As a mist.

May cause drowsiness or dizziness.

Suspected of causing cancer.

May cause harm to breast-fed children.

May cause damage to organs (nervous system) through prolonged or repeated exposure if inhaled.

Precautionary Statement(s):

Prevention:

Obtain special instructions before use.

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

Do not breathe fume, mist, vapours, spray.

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Avoid contact during pregnancy and while nursing.

Wash hands and skin thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves, protective clothing, eye protection, face protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTRE or doctor.

Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of water.

Call a POISON CENTRE or doctor if you feel unwell.

If skin irritation or rash occurs: Get medical advice or attention.

Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTRE or doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a POISON CENTRE or doctor if you feel unwell.

If eye irritation persists: Get medical advice or attention.

In case of fire: Use appropriate foam, carbon dioxide, dry chemical powder, water spray or fog to extinguish.

Storage:

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Hydrotreated kerosene	64742-47-8	94.94		
d-Limonene	5989-27-5	5.06		

Notes

Use of Generic SDS:

If the concentration or actual concentration range of an ingredient of a particular hazardous product in the series is different from the concentration or actual concentration range disclosed for the rest of the series, either the concentration or the actual concentration range must be indicated beside that ingredient under item 3 (Composition/Information on ingredients) of the SDS. Furthermore, if any other specific information element(s) (such as flash point, numerical measure of toxicity, etc.) for a particular hazardous product in the series differs from that of the other products in the series (without affecting the classification), the information element relevant to that hazardous product must be disclosed on the SDS with an indication to which hazardous product each relates.

Source: Health Canada - Technical Guidance on the Requirements of the Hazardous Products Act and the Hazardous Products Regulations WHMIS 2015 Supplier Requirements - pg 117

SECTION 4. FIRST-AID MEASURES

First-aid Measures

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Inhalation

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Get medical advice or attention if you feel unwell or are concerned. If skin irritation or a rash occurs, get medical advice or attention. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Eye Contact

Avoid direct contact. Wear chemical protective gloves if necessary. Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Immediately call a Poison Centre or doctor.

Most Important Symptoms and Effects, Acute and Delayed

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Immediate Medical Attention and Special Treatment

Target Organs

Skin.

Special Instructions

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Medical Conditions Aggravated by Exposure

Dermatitis, asthma, respiratory conditions.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Combustible liquid. Can ignite if heated. Releases vapour that can form explosive mixture with air at or above the flash point. See Section 9 (Physical and Chemical Properties) for flash point and explosive limits.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

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Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Evacuate downwind locations. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA	
d-Limonene	Not established	Not established	Not established	Not established	30 ppm		
Hydrotreated kerosene	200 mg/m3 A3	Not established	Not established	Not established			

Appropriate Engineering Controls

General ventilation is usually adequate. For large scale use of this product: use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: nitrile rubber.

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Respiratory Protection

Not usually required when working with small quantities. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance Clear colourless liquid.

Odour Hydrocarbon
Odour Threshold Not available
pH Not applicable

Melting Point/Freezing Point Not available (melting); Not available (freezing)

Initial Boiling Point/RangeNot availableFlash Point61 °C (142 °F)Evaporation RateNot availableFlammability (solid, gas)Not applicable

Upper/Lower Flammability or

Explosive Limit

Not available (upper); Not available (lower)

Vapour Pressure
Not available
Vapour Density (air = 1)
Relative Density (water = 1)
Not available
0.787 at 20 °C

Solubility Not available in water; Not available (in other liquids)

Partition Coefficient, Not available

n-Octanol/Water (Log Kow)

Auto-ignition TemperatureNot availableDecomposition TemperatureNot available

Viscosity Not available (kinematic); Not available (dynamic)

Other Information

Physical State Liquid

Molecular Weight Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Temperatures above 60.0 °C (140.0 °F)

Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; irritating chemicals; toxic chemicals.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

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Skin contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
d-Limonene	Not available	4400 mg/kg (male rat)	> 5000 mg/kg
Hydrotreated kerosene	> 5 mg/L (rat) (4-hour exposure)	> 5000 mg/kg (rat)	> 2000 mg/kg (rabbit)

LC50: Not applicable.
Oral ATE: 4965.74 mg/kg
Dermal ATE: 2062.62 mg/kg
Skin Corrosion/Irritation

Human experience and animal tests show moderate or severe irritation.

Serious Eye Damage/Irritation

Human experience and animal tests show serious eye irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May be harmful based on human experience and animal tests. Vapour may cause as a mist at high concentrations depression of the central nervous system. Symptoms may include headache, nausea, dizziness, drowsiness and confusion. A severe exposure can cause unconsciousness. (Hydrotreated kerosene)

May be harmful based on human experience and animal tests. At high concentrations nose and throat irritation. (d-Limonene)

Skin Absorption

Not harmful based on animal tests. (Hydrotreated kerosene). (d-Limonene).

Ingestion

May cause a laxative effect. Symptoms may include nausea, vomiting, stomach cramps and diarrhea. (d-Limonene)

Aspiration Hazard

Can cause lung damage if aspirated based on human experience. Death can result.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause Following skin contact: dermatitis. Symptoms may include dry, red, cracked skin (dermatitis). (d-Limonene). (Hydrotreated kerosene)

May cause damage to organs based on animal studies. Harmful effects on the kidneys. (d-Limonene)

May cause If inhaled: effects on the central nervous system, "organic solvent syndrome".

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer.

Skin sensitizer. (d-Limonene)

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
d-Limonene	Group 3	Not designated	Not Listed	Not Listed
Hydrotreated kerosene	Group 3	A3	Not Listed	Listed

Key to Abbreviations

Group 3 = Not classifiable as to its carcinogenicity to humans.

A3 = Animal carcinogen.

Reproductive Toxicity

Development of Offspring

Animal studies show effects on the offspring. However, these effects are only seen with significant toxicity in the mothers. Known to cause: minor reversible effects (e.g. delayed ossification). (d-Limonene)

Does not cause harm to the unborn child. (Hydrotreated kerosene)

Sexual Function and Fertility

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No information was located. (Hydrotreated kerosene)

Not known to cause effects on sexual function or fertility. No information was located. (d-Limonene)

Effects on or via Lactation

Can transfer to mother's milk. May cause harm to breastfed babies.

Germ Cell Mutagenicity

Not mutagenic. (Hydrotreated kerosene). (d-Limonene)

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

Ecotoxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
d-Limonene	0.72 mg/L (Pimephales promelas (fathead minnow); 96-hour)	0.36 mg/L (Daphnia magna (water flea); 48-hour)		
Hydrotreated kerosene	2.2 mg/L (Lepomis macrochirus (bluegill); 96-hour)	Not available		

Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
d-Limonene	Not available		Not available	
Hydrotreated kerosene	Not available		Not available	

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Environmental Not applicable

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Hazards

Special Precautions Please note: In containers of 450 L or less this product is not classified as a Dangerous Good

according to TDG Exemption 1.33

In containers of 450L of less, this product meets the requirements of DOT exemption as per 49

CFR, section 173.150 (f).

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Proof of Dangerous Goods Classification

Date of ClassificationFebruary 06, 2017Technical NameNot RegulatedClassificationNot Regulated

Classification Method Flashpoint as per Section 9

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By Compliance and Regulatory Department

Phone No. 905-878-5544 **Date of Preparation** March 21, 2017

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). **Additional Information** We are committed to uphold the Industry Consumer Ingredient Communication Voluntary

Initiative

Please send us your request by visiting our website at www.recochem.com.

Ingredients present (intentionally added ingredients) at a concentration of greater than one percent (1%) shall be listed in descending order of predominance. Ingredients present at a concentration of not more than one percent shall be listed but may be disclosed without

respect to order of predominance.

Disclaimer Notice to reader: To the best of our knowledge, the information contained herein is accurate.

However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are

described herein, we cannot guarantee that these are the only hazards that exist.

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