Material Safety Data Sheet

WHMIS (Pictograms)	WHMIS (Classification)	Personal Protective Equipment
	Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). **Class D-2A: Material causing other toxic effects (VERY TOXIC).**	

Section 1. Product and Company Identification

Product Name / Trade name	**Diesel Fuel Conditioner**	**Associated Product's Item Code**	**15-281**
Synonym	Not available.	**CAS #**	Mixture.
Chemical Family	Solvent.	**Validation Date**	**Sept. 08 2006**
Chemical Formula	Not applicable.	**Print Date**	Sept. 08 2006
Manufacturer	Recochem inc. 850 Montée de Liesse Montréal (Québec) (514) 341-3550 www.recochem.com	**In Case of Emergency**	Recochem Inc. Communications and Regulatory Affairs Department (905) 791-1788
Material Uses	Consumer products: FUEL ADDITIVES		

Section 2. Hazardous Ingredients

Name	CAS #	% by Weight	Exposure Limits	
			Canadian Values (ACGIH)	U.S. Values (OSHA)
Solvent 3139	64742-88-7	55-75	**ACGIH (Canada, 2003).** TWA: 100 ppm 8 hour(s). TWA: 525 mg/m^3 8 hour(s).	Solvent 3139 **OSHA (United States, 2003).** TWA: 500 ppm 8 hour(s). TWA: 2900 mg/m^3 8 hour(s).
Isopropyl alcohol	67-63-0	15-25	**ACGIH (Canada, 2003).** TWA: 200 ppm 8 hour(s). STEL: 400 ppm 15 minute(s). TWA: 492 mg/m^3 8 hour(s). STEL: 984 mg/m^3 15 minute(s).	Isopropyl alcohol **OSHA (United States, 2003).** TWA: 400 ppm 8 hour(s). TWA: 980 mg/m^3 8 hour(s).
Acetone	67-64-1	5-10	**ACGIH (Canada, 2003).** TWA: 500 ppm 8 hour(s). STEL: 750 ppm 15 minute(s). TWA: 1188 mg/m^3 8 hour(s). STEL: 1782 mg/m^3 15 minute(s).	Acetone **OSHA (United States, 2003).** TWA: 1000 ppm 8 hour(s). TWA: 2400 mg/m^3 8 hour(s).

Section 3. Hazard Identification

Emergency Overview	DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOUR, VAPOUR MAY CAUSE FLASH FIRE. MAY CAUSE EYE IRRITATION. MAY BE FATAL IF INHALED. Keep away from heat, sparks and flame. Avoid contact with eyes. Do not ingest. Avoid breathing vapour or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Potential Acute Health Effects	**See Section #11: "Toxicological Information" for further human health effects.** Hazardous in case of eye contact (irritant), of ingestion, of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant, permeator). Non-corrosive for skin. Non-sensitizer for skin. Non-sensitizer for lungs. Non-corrosive to the eyes. Non-corrosive for lungs. Severe over-exposure can result in death.
Note to Physician	Not available.

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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention.
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 5. Fire Fighting Measures

Products of Combustion	These products are carbon oxides (CO, CO_2).
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Fire Hazards	Container explosion may occur under fire conditions or when heated. Vapour may travel considerable distance to source of ignition and flash back. Vigourously supports combustion. Combustible when exposed to heat or flame. (Solvent 3139)
Explosion Hazards	Vapour may travel considerable distance to source of ignition and flash back. (Solvent 3139)

Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill and Leak	Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Section 7. Handling and Storage

Handling	Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.
Storage	**See Section #10 for applicable incompatible materials.** Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8. Exposure Controls, Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	
Eyes	Safety glasses.
Body	No special protective clothing is required.
Respiratory	Vapour respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Hands	Impervious gloves.

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Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	**Odour**	Not available.
Molecular Weight	Not applicable.	**Taste**	Not available.
pH	Neutral.	**Colour**	Not available.
Boiling/Condensation Point	The lowest known value is 56°C (132.8°F) (2-propanone). Weighted average: 148.82°C (299.9°F)	**Volatility**	100% (w/w).
Melting/Freezing Point	May start to solidify at -58°C (-72.4°F) based on data for: Solvent 3139. Weighted average: -67.05°C (-88.7°F)	**Evaporation Rate**	>1
Specific Gravity	0.78 to 0.79 (Water = 1)	**Odour Threshold**	The lowest known value is 43 ppm (Isopropanol) Weighted average: 48.18 ppm
Vapour Pressure	The highest known value is 24 kPa (180 mm Hg) (at 20°C) (2-propanone). Weighted average: 3.11 kPa (23.33 mm Hg) (at 20°C)	**Viscosity**	Dynamic: The highest known value is 2.4 cP (Isopropanol) Kinematic: The highest known value is 1.14 cSt (Solvent 3139) Weighted average: 1.06 cSt
Vapour Density	>1 (Air = 1)	**Solubility**	Easily soluble in diethyl ether, n-octanol. Soluble in acetone. Very slightly soluble in methanol. Insoluble in cold water, hot water.
VOC Content	100 (%)	**Other Properties**	Not available.

The Product is:	Flammable.
Auto-ignition Temperature	The lowest known value is 229°C (444.2°F) (Solvent 3139).
Flash Point	Closed cup: <-4°C (24.8°F).
Flammable Limits	The greatest known range is LOWER: 1% UPPER: 13.3% (Solvent 3139)
Fire Hazards in Presence of Various Substances	Highly flammable in presence of open flames, sparks and static discharge. Flammable in presence of heat. Non-flammable in presence of shocks.

Section 10. Stability and Reactivity

Stability	The product is stable.
Conditions of Instability	Not available.
Incompatibility with Various Substances	Slightly reactive to reactive with OXIDIZING AGENTS.

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Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation.
Toxicity to Animals	Acute oral toxicity (LD50): 5469 mg/kg (Rat) (Calculated value for the mixture). Acute dermal toxicity (LD50): 12870 mg/kg [Rabbit]. (Isopropanol). Acute toxicity of the vapor (LC50): 17000 ppm 4 hour(s) [Rat.]. (Isopropanol).
Acute Effects on Humans	
Eyes	Hazardous in case of eye contact (irritant). Non-corrosive to the eyes.
Skin	Slightly hazardous in case of skin contact (irritant, permeator). Non-corrosive for skin. Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Inhalation	Very hazardous in case of inhalation. May be fatal if inhaled.
Ingestion	Hazardous in case of ingestion.
Chronic Effects on Humans	Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant). Slightly hazardous in case of skin contact (permeator). Non-corrosive for skin. Non-sensitizer for skin. Non-sensitizer for lungs. **CARCINOGENIC EFFECTS**: Classified 4 (Probably not for human) by IARC [Isopropanol]. Classified A4 (Not classifiable for human or animal.) by ACGIH, D (Not classifiable for human or animal.) by EPA [2-propanone]. **MUTAGENIC EFFECTS**: Non-mutagenic for bacteria and/or yeast. [2-propanone]. **TERATOGENIC EFFECTS**: Not available. **DEVELOPMENTAL TOXICITY**: Not available. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 12. Ecological Information

Ecotoxicity	**For accidential discharges into environment, see Section #6: "Accidential Release Measures" for suggested instructions.** Not available.

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

Canada Transportation of Dangerous Goods (TDG) Information

Primary Class	Class 3: Flammable liquid.
Subsidiary Class (if applicable)	-
Proper shipping name	FLAMMABLE LIQUIDS, N.O.S. Mixture (2-propanone)
Hazard Identification Number	1993
Packing Group	II
Special Provisions	In containers of 1 L (1Kg) capacity or less this product is classified as a "Limited Quantities""Consumer Commodity" under TDG regulations.

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International Maritime Dangerous Goods (IMDG) Transportation Information

Primary Class	Class 3: Flammable liquid.
Subsidiary Class (if applicable)	-
Proper shipping name	FLAMMABLE LIQUIDS, N.O.S. Mixture (2-propanone)
Hazard Identification Number	1993
Packing Group	II
Marine Pollutant	Potential
Special Provisions	In containers of 1 L (1Kg) capacity or less this product is classified as a "Limited Quantity" under IMDG regulations

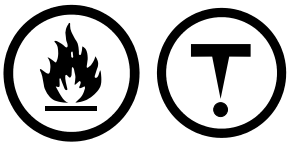
United States Department of Transportation (DOT) Information

Primary Class	Class 3: Flammable liquid.
Subsidiary class (if applicable)	-
Proper shipping name	FLAMMABLE LIQUIDS, N.O.S. Mixture (2-propanone)
Hazard Identification Number	1993
Packing Group	II
Special Provisions	In containers of 1 L (1Kg) this product is qualified as a "consumer commodity" ORM-D under DOT

International Air Transport Association (IATA)	For air shipment classification and associated regulations, please refer to the latest edition of IATA Dangerous Goods Regulations.

Section 15. Other Regulatory Information and Pictograms

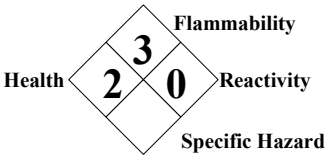
WHMIS Classification (Canada)	Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-2A: Material causing other toxic effects (VERY TOXIC).
Canada Domestic Substances List (DSL) Status	This product and/ or all of its components are on the DSL.
HCS Classification (U.S.A.)	Flammable liquid
U.S.A. Regulatory Lists	This product and/ or all of its components are on the TSCA inventory list.



Hazardous Material Information System (U.S.A.)

Health	2
Flammability	3
Reactivity	0
Personal Protection	G

National Fire Protection Association (U.S.A.)



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Section 16. Other Information

Validated and verified by Compliance and Technical Information Manager on 9/8/2006 ph.# 905-791-1788.	Printed 9/8/2006.

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MSDS are available at www.recochem.com