

Diesel Fuel Conditioner

SECTION 1. IDENTIFICATION

Product Identifier	Diesel Fuel Conditioner
Other Means of Identification	15-281. 35-281SO, 35-281SO-MELT, 55-911C
Other Identification	Melt Gelled Fuel Treatment, Emergency Melt
Recommended Use	Please refer to Product label.
Restrictions on Use	None known.
Manufacturer/Supplier Identifier	Recochem Inc., 850 Montee de Liesse, Montreal, QC, H4T 1P4, Compliance and Regulatory Department, 905-878-5544, www.recochem.com
Emergency Phone No.	CANUTEC, 613-996-6666, 24 Hours
SDS No.	1708

SECTION 2. HAZARD IDENTIFICATION

Classification

Flammable liquid - Category 2; Acute toxicity (Oral) - Category 4; Acute toxicity (Inhalation) - Category 3; Skin irritation - Category 2; Eye irritation - Category 2A; Germ cell mutagenicity - Category 1B; Carcinogenicity - Category 1B; Specific target organ toxicity (single exposure) - Category 3; Aspiration hazard - Category 1; Aquatic hazard (Chronic) - Category 2

Label Elements



Signal Word:
Danger

Hazard Statement(s):

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H331	Toxic if inhaled.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:	
P201	Obtain special instructions before use.

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P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical, ventilating, lighting, and other equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing fume, mist, vapours, spray.
P264 Wash hands and skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/eye protection/face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
P330 Rinse mouth.
P331 Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P312 Call a POISON CENTRE or doctor if you feel unwell.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTRE or doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTRE or doctor if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P370 + P378 In case of fire: Use appropriate foam, carbon dioxide, dry chemical powder, water spray or fog to extinguish.
P391 Collect spillage.

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
Stoddard solvent	8052-41-3	66.27	
2-Propanol	67-63-0	16.30	
Acetone	67-64-1	9.86	
n-Nonane	111-84-2	2.09	
1,2,4-Trimethylbenzene	95-63-6	2.09	

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SECTION 4. FIRST-AID MEASURES

First-aid Measures

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 breathing has stopped, trained personnel should begin rescue breathing. If the heart has stopped, trained personnel should start cardiopulmonary resuscitation (CPR) or automated external defibrillation (AED). Avoid mouth-to-mouth contact by using a barrier device. Immediately call a Poison Centre or doctor.

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 rinse with lukewarm, gently flowing water for 15-20 minutes. Call a Poison Centre or doctor if you feel unwell. If skin irritation 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

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Rinse mouth with water. 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

Nervous system.

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.

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

Highly flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air. Can be ignited by static discharge. Can accumulate static charge by flow, splashing or agitation. Liquid can float on water and may travel to distant locations and/or spread fire. May travel a considerable distance to a source of ignition and flash back to a leak or open container. See Section 9 (Physical and Chemical Properties) for flash point and explosive limits. May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, resulting in a fire and/or health hazard. Closed containers may rupture violently when heated releasing contents. In a fire, the following hazardous materials may be generated: irritating chemicals; toxic chemicals; corrosive acetic

acid; 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

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. Eliminate all ignition sources. Use grounded, explosion-proof equipment. May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, if ventilation is not sufficient. Distant ignition and flashback are possible. Monitor area for flammable or explosive atmosphere.

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

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Acetone	250 ppm A4	500 ppm A4	750 ppm	1000 ppm		
2-Propanol	200 ppm	400 ppm	400 ppm	500 ppm		

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Stoddard solvent	100 ppm	Not established	100 ppm	Not established		
n-Nonane	200 ppm	Not established	200 ppm	Not established		
1,2,4-Trimethylbenzene	25 ppm	Not established	25 ppm	Not established		

Appropriate Engineering Controls

Do not allow product to accumulate in the air in work or storage areas, or in confined spaces. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Control static electricity discharges which includes bonding of equipment to ground. Use only non-combustible, compatible materials for walls, floors, ventilation system, air cleaning devices, pallets, shelving. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

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

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 liquid.
Odour	Hydrocarbon (Stoddard solvent)
Odour Threshold	< 1 ppm (Stoddard solvent)
pH	Not available
Melting Point/Freezing Point	-70 °C (-94 °F) (Stoddard solvent) (melting); -70 °C (-94 °F) (Stoddard solvent) (freezing)
Initial Boiling Point/Range	149.0 - 204.5 °C (300.2 - 400.1 °F) (Stoddard solvent)
Flash Point	< -4 °C (25 °F) (closed cup)
Evaporation Rate	0.1 (estimated) (n-butyl acetate = 1)
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	3.98 - 4.50 mm Hg (0.53 - 0.60 kPa) at 20 °C (Stoddard solvent)
Vapour Density (air = 1)	5 (estimated)
Relative Density (water = 1)	0.780 - 0.795 at 20 °C
Solubility	Not available in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not 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

Open flames, sparks, static discharge, heat and other ignition sources. Sunlight. Prolonged storage. Temperatures above -4.0 °C (24.8 °F)

Incompatible Materials

Reacts violently with: strong oxidizing agents (e.g. perchloric acid), strong acids (e.g. hydrochloric acid), strong reducing agents (e.g. hydrides).

Reacts explosively with: nitric acid.

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; irritating chemicals; toxic chemicals; very toxic, flammable formaldehyde; corrosive acetic acid.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Acetone	18600 ppm (male mouse) (4-hour exposure)	5245 mg/kg (male mouse)	> 15800 mg/kg (rabbit)
2-Propanol	17000 ppm (rat) (4-hour exposure)	3600 mg/kg (mouse)	12890 mg/kg (rabbit)
Stoddard solvent	> 5500 mg/m3 (rat) (4-hour exposure)	5000 mg/kg (rat)	> 3000 mg/kg (rabbit)
n-Nonane	3200 ppm (rat) (4-hour exposure)	15 g/kg (rat)	Not available
1,2,4-Trimethylbenzene	18000 mg/m3 (rat)	5000 mg/kg (rat)	Not available

LC50: Not applicable.

LD50 (oral): Not applicable.

LD50 (dermal): Not applicable.

Skin Corrosion/Irritation

Animal tests show moderate or severe irritation. (Stoddard solvent)

Serious Eye Damage/Irritation

Human experience and animal tests show serious eye irritation. The vapour also irritates the eyes. (Acetone). (2-Propanol)

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

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Causes depression of the central nervous system. Symptoms may include headache, nausea, dizziness, drowsiness and confusion. A severe exposure can cause unconsciousness. (Acetone). (2-Propanol). (Stoddard solvent)

May cause nose and throat irritation. (2-Propanol). (Stoddard solvent). (Acetone)

May cause At high concentrations harmful effects on the kidneys, harmful effects on the liver. (Acetone)

Skin Absorption

May cause depression of the central nervous system. (Acetone). (2-Propanol).

Ingestion

May cause If large amounts are swallowed can cause effects as described for inhalation. Depression of the central nervous system, irritation of the mouth, throat and stomach, harmful effects on the kidneys. (2-Propanol). (Acetone)

Aspiration Hazard

May be drawn into the lungs (aspirated) if swallowed or vomited. Death can result.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause damage to organs based on studies in people and animals. If inhaled and/or following skin contact: effects on the central nervous system. Symptoms may include restlessness, reduced ability to think, muscle tremors, memory loss and personality changes. "organic solvent syndrome", effects similar to STOT (Specific Target Organ Toxicity) - Single Exposure, as described above. (Stoddard solvent). (2-Propanol). (Acetone)

Causes damage to organs based on studies in people and animals. Following skin contact: dermatitis. Symptoms may include dry, red, cracked skin (dermatitis). effects similar to STOT (Specific Target Organ Toxicity) - Single Exposure, as described above. (Acetone). (2-Propanol). (Stoddard solvent)

May cause If inhaled and/or following skin contact: at high concentrations harmful effects on the kidneys, harmful effects on the liver. (Stoddard solvent)

May cause If inhaled and/or following skin contact: a decrease in the number or size of red blood cells (anemia). In severe cases death can result. (Stoddard solvent)

May cause If inhaled and/or following skin contact: at high concentrations harmful effects on the heart. (2-Propanol). (Acetone)

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Acetone	Not Listed	A4	Not Listed	Not Listed
2-Propanol	Group 3	A4	Not Listed	Not Listed
Stoddard solvent	Group 3	Not designated	Not Listed	Not Listed
n-Nonane	Not Listed	Not designated	Not Listed	Not Listed
1,2,4-Trimethylbenzene	Not Listed	Not designated	Not Listed	Not Listed

Key to Abbreviations

A4 = Not classifiable as a human carcinogen.
Group 3 = Not classifiable as to its carcinogenicity to humans.

Reproductive Toxicity

Development of Offspring

May harm the unborn child. Conclusions cannot be drawn from the limited studies available. (Stoddard solvent)

May harm the unborn child. However, these effects are only seen with significant toxicity in the mothers.

(2-Propanol)

Studies in people show effects on the unborn child. Conclusions cannot be drawn from the limited studies available.

Has been associated with: miscarriage.

Animal studies show effects on the offspring. If inhaled: however, these effects are only seen with significant toxicity in the mothers. Has been associated with: decreased weight. Embryotoxic (late resorptions). (Acetone)

Studies in people show effects on the unborn child. Conclusions cannot be drawn from the limited studies available.

Has been associated with: miscarriage.

Sexual Function and Fertility

Studies in people show effects on sexual function and/or fertility. Conclusions cannot be drawn from the limited studies available. Has been associated with: effects on the menstrual cycle. (2-Propanol)

Animal studies show effects on sexual function and/or fertility. If swallowed: known to cause: male sterility.

(Acetone)

Studies in people show effects on sexual function and/or fertility. Conclusions cannot be drawn from the limited studies available. Reduced male and female fertility. (Acetone)

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

Causes mutagenicity in non-reproductive (somatic) cells in tests using live animals. (Stoddard solvent)

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Acetone	8300 mg/L (Lepomis macrochirus (bluegill))	Not available		
2-Propanol	9640 mg/L (Pimephales promelas (fathead minnow); 96-hour)	7500-13299 mg/L (Daphnia magna (water flea); 48-hour)		> 2000 mg/L (Pseudokirchneriella subcapitata (algae); 72-hour)
Stoddard solvent	Not available	Not available		
n-Nonane	Not available	Not available		
1,2,4-Trimethylbenzene	7.72 mg/L (Pimephales promelas (fathead minnow); 96-hour)	Not available		

Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
Acetone	Not available		Not available	
Stoddard solvent	Not available		Not available	

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n-Nonane	Not available		Not available	
1,2,4-Trimethylbenzene	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

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	1993	FLAMMABLE LIQUID, N.O.S. (ACETONE, PETROLEUM DISTILLATES)	3	II
US DOT	1993	FLAMMABLE LIQUID, N.O.S. (ACETONE, PETROLEUM DISTILLATES)	3	II

Environmental Hazards Marine Pollutant (1,2,4-Trimethylbenzene)

Special Precautions Please note: In containers of 1 L (1Kg) capacity or less this product is classified as a "Limited Quantities""Consumer Commodity" under TDG regulations.
In containers of 1 L (1Kg) this product is qualified as a "consumer commodity" ORM-D under DOT

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.

Additional USA Regulatory Lists

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California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer.

Custom Regulatory 1

Consumer Product Safety Improvement Act of 2008 General Conformity Certification

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product container.

SECTION 16. OTHER INFORMATION

SDS Prepared By Compliance and Regulatory Department

Phone No. 905-878-5544

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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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