MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	**Diesel/Bio-diesel/Distillate**
Revision date	06-23-2011
Version #	03
CAS #	Mixture
Product code	2181
Product use	Fuel. Refinery feedstock.
Synonym(s)	Premium Diesel, EP 3000, Railroad Diesel, Seasonal Diesel, Premium Mine Diesel, Mine Diesel, Summer Diesel, Winter Diesel, Dyed (Purple) Diesel, Export Diesel, Electric Generating Diesel, ARDS Light Distillate, ARDS Heavy Distillate/Diesel, Crude Straight run Diesel, MDU Unifinate/Diesel, CAT light Cycle oil, DHU Low Pour Distillate, DHU High Pour Distillate, #2 Fuel Oil.
Manufacturer/Supplier	Consumers' Co-operative Refineries Ltd. P.O. Box 260 550E, 9th Avenue North Regina, SK S4P 3A1 CA Telephone Number: (306) 721-5353 Contact Person: Safety Advisor
Emergency	24 Hour Emergency Telephone (613) 996-6666 - Canutec
Supplier	Federated Co-operatives Ltd. P.O. Box 1050 401 - 22nd Street East Saskatoon S7K 3M9 CA
Emergency telephone	(613) 996-6666
Telephone Number:	(306) 244-3447

2. Hazards Identification

Physical state	Liquid.
Emergency overview	WARNING! Combustible liquid and vapor. Aspiration hazard: Harmful if swallowed - may enter lungs if swallowed or vomited. High vapor concentrations may cause drowsiness and irritation of the eyes or respiratory tract. Prolonged or repeated skin contact may cause drying, cracking, or irritation. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
OSHA regulatory status	This product is hazardous according to OSHA 29 CFR 1910.1200.
Potential health effects	
Routes of exposure	Ingestion. Eye contact. Inhalation. Skin contact.
Eyes	May cause eye irritation. Contact may cause irritation with redness, tearing, pain, and/or blurred vision.
Skin	Prolonged or repeated contact may dry skin and cause irritation.
Inhalation	Vapors may cause headache, fatigue, dizziness and nausea. May cause central nervous system effects.
Ingestion	Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis.
Potential environmental effects	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Fuels, diesel	68334-30-5	95 - 100
Canola Oil - Fatty Acid Methyl Ester	129828-16-6	0 - 5

Rapeseed Oil - Fatty Acid Methyl Ester	73891-99-3	0 - 5
Soy Methyl Esters from Vegetable Oil	67784-80-9	0 - 5

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses. Get medical attention immediately.

Skin contact Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Inhalation Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately!

Ingestion Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. DO NOT induce vomiting because of danger of aspirating liquid into lungs. Call a physician or poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth to an unconscious person.

Notes to physician Treat symptomatically. The effects might be delayed.

General advice Get medical attention if any discomfort develops.

5. Fire Fighting Measures

Flammable properties The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. Material will float and can be re-ignited on surface of water.

Extinguishing media

Suitable extinguishing media Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters

Specific hazards arising from the chemical Vapors may form explosive mixtures with air. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember.

Protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do it without risk. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

Hazardous combustion products Carbon monoxide and carbon dioxide.

6. Accidental Release Measures

Personal precautions Stay upwind. Ventilate closed spaces before entering them. Wear suitable protective clothing, gloves and eye/face protection. For personal protection, see section 8 of the MSDS.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not contaminate water. Contact local authorities in case of spillage to drain/aquatic environment.

Methods for containment Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Small Spills: Absorb spillage with non-combustible, absorbent material.

Large Spills: Remove with vacuum trucks or pump to storage/salvage vessels. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Wash area with soap and water. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labeled container.

7. Handling and Storage

Handling Access to work area should be restricted to people handling the product only. Should be handled in closed systems, if possible. Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapors. Wear appropriate personal protective equipment. Ground container and transfer equipment to eliminate static electric sparks. The product is a combustible liquid. Take the necessary precautionary measures. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Immediately change contaminated clothes. Do not eat, drink or smoke when using the product. Be aware of potential for surfaces to become slippery. Observe good industrial hygiene practices.

Storage Keep away from heat, sparks and open flame. Keep in a cool, well-ventilated place. Keep away from food, drink and animal feeding stuffs. Store away from incompatible materials.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Fuels, diesel (68334-30-5)	TWA	100 mg/m3	Inhalable fraction and vapor.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Fuels, diesel (68334-30-5)	TWA	100 mg/m3

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Fuels, diesel (68334-30-5)	TWA	100 mg/m3	Vapor and aerosol.

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Fuels, diesel (68334-30-5)	TWA	100 mg/m3	Vapor and aerosol.

Engineering controls Provide adequate ventilation and minimize the risk of inhalation of vapors and oil mist. Provide easy access to water supply and eye wash facilities. Use explosion-proof equipment.

Personal protective equipment

Eye / face protection Wear approved safety goggles.

Skin protection Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact glove manufacturer for specific information.

Respiratory protection Do not breathe mist or vapor. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment. Wear NIOSH approved respirator appropriate for airborne exposure at the point of use.

General hygiene considerations Do not eat, drink or smoke when using the product. Wash hands after handling. Launder contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practices.

9. Physical & Chemical Properties

Appearance	Not available.
Color	Straw.
Odor	Hydrocarbon-like.
Odor threshold	Not available.
Physical state	Liquid.
Form	Not available.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	302 - 734 °F (150 - 390 °C)
Flash point	> 104 °F (> 40 °C) Closed Cup

Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	7.6 %
Flammability limits in air, lower, % by volume	0.6 %
Vapor pressure	< 2 psia
Vapor density	Not available.
Specific gravity	< 1 @ 40 °C
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	1.7 - 4.1 cSt @ 40 °C

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal storage and handling conditions.
Conditions to avoid	Heat, sparks, flames, elevated temperatures. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
Incompatible materials	Strong acids. Strong oxidizing agents.
Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
Possibility of hazardous reactions	Polymerization will not occur. No dangerous reaction known under conditions of normal use.

11. Toxicological Information

Acute effects	Swallowing or vomiting of the liquid may result in aspiration into the lungs. Breathing of high concentrations may cause dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness.
Local effects	Prolonged or repeated contact may dry skin and cause irritation.

US ACGIH Threshold Limit Values: Skin designation

Fuels, diesel (CAS 68334-30-5)	Can be absorbed through the skin.

Sensitization	May cause eczema-like skin disorders (dermatitis).
Chronic effects	Prolonged or repeated contact with skin may cause redness, itching, irritation, eczema/chapping and oil acne.
Carcinogenicity	IARC, NTP and OSHA: Not listed.

ACGIH Carcinogens

Fuels, diesel (CAS 68334-30-5)	A3 Confirmed animal carcinogen with unknown relevance to humans.

Epidemiology	Pre-existing skin conditions including dermatitis might be aggravated by exposure to this product.
Mutagenicity	Knowledge about mutagenicity is incomplete.
Reproductive effects	Knowledge about reproductive effects is incomplete.
Further information	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

12. Ecological Information

Ecotoxicity	Oil spills are generally hazardous to the environment.
Environmental effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.
Persistence and degradability	The degradability of the product has not been stated.
Bioaccumulation / Accumulation	No data available on bioaccumulation.

Partition coefficient (n-octanol/water)	Not available.
Mobility in environmental media	The product is insoluble in water. It will spread on the water surface while some of the components will eventually sediment in water systems. The volatile components of the product will spread in the atmosphere.

13. Disposal Considerations

Disposal instructions	Disposal of this product, solutions, or containers must at all times comply with the requirements of the environmental protection and waste disposal legislation and any regional local authority requirements.
Waste from residues / unused products	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 manner (see: Disposal instructions).

14. Transport Information

DOT

Basic shipping requirements:

UN number	UN1202
Proper shipping name	Diesel Fuel
Hazard class	Combustible Liquid
Packing group	III
Labels required	Combustible Liquid

Additional information:

Special provisions	144, B1, IB3, T2, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242
ERG number	128

IATA

Basic shipping requirements:

UN number	1202
Proper shipping name	Diesel Fuel
Hazard class	3
Packing group	III

Additional information:

ERG code	3L

IMDG

Basic shipping requirements:

UN number	1202
Proper shipping name	Diesel Fuel
Hazard class	3
Packing group	III
EmS No.	F-E, S-E

TDG

Basic shipping requirements:

Proper shipping name	Diesel Fuel
Hazard class	3
UN number	UN1202
Packing group	III

15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification(40 CFR 707, Subpt. D)

Not regulated.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CRF 355, Appendix A)
No

Section 311/312 (40 CFR 370)
No

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)
Not controlled

Canadian regulations
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status
Controlled

WHMIS classification
B3 - Flammable/Combustible
D2B - Other Toxic Effects-TOXIC

WHMIS labeling

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Fuels, diesel (CAS 68334-30-5) Listed.

16. Other Information

HMIS® ratings
Health: 2
Flammability: 2
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 2
Instability: 0

Disclaimer
The information in the sheet was written based on the best knowledge and experience currently available.

Issue date
06-23-2011