

MATERIAL SAFETY DATA SHEET

4Plus Premium with BioArmor

Section 1 – COMPANY IDENTIFICATION

DSG Saskatoon Diesel Services
230 29th Street East
Saskatoon, SK S7L 6Y6

Product Information: 1-800-667-6879

IN CASE OF A DANGEROUS GOODS EMERGENCY
CALL CANUTEC AT THE 24-HOUR NUMBER
613-966-666

Section 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous Ingredients:</u>	<u>CAS Number</u>
Proprietary Ingredients	N/A
2-Ethylhexyl Nitrate	27247-96-7
2-Ethylhexyl Alcohol	104-76-7
Detergents	N/A
Heavy Aromatic Naphtha	64742-94-5
*Ethylene Glycol N-Butyl Ether	111-76-2
Light Ends of Polyethylbenzene Residue	178535-25-6
Naphtha (Petroleum) Hydrotreated heavy	64742-48-9

<u>Non-Hazardous Ingredients</u>	<u>CAS Number</u>
Methyl Ester from lipid sources (Product may contain any of the following)	
Methyl Soyate	67784-80-9
Rapeseed Methyl Ester (RME)	73891-99-3
Methyl Tallowate	61788-71-2
Mustard Methyl Ester (MME)	N/A

Section 3 – HAZARDOUS IDENTIFICATION

Potential Health Effects:

Prolonged or repeated exposure to Ethylene Glycol N-Butyl Ether may cause skin irritation which may be slow to heal. A single prolonged exposure may result in the material being absorbed in harmful amounts. Excessive exposure may cause hemolysis, thereby impairing the blood's ability to transport oxygen. Repeated minor exposure may result in absorption of harmful amounts. May cause moderate eye irritation which may be slow to heal. May cause moderate corneal injury. Effects may be slow to heal. Vapors of Ethylene Glycol N-Butyl Ether may irritate eyes. A single prolonged excessive inhalation exposure may cause adverse effects. Excessive exposure may cause irritation to upper respiratory tract. Observations in animals include blood and kidney effects. Single dose oral toxicity of Ethylene Glycol N-Butyl Ether is considered to be moderate. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury. One case of Massive Ingestion (i.e. attempted suicide) reported blood (hemolysis) and kidney effects.

Skin contact with Detergent may cause skin sensitization upon extended contact. The compound may cause skin sensitization in susceptible individuals. Eye contact may cause eye irritation with discomfort, tearing, or blurring of vision. Inhalation may initially include irritation of the upper respiratory passages with coughing and discomfort. Individuals with preexisting diseases of the central nervous system may have increased susceptibility to the toxicity of excessive exposures to Detergent.

Inhalation or ingestion of Heavy Aromatic Naphtha may cause central nervous system depression with anesthetic effects, such as dizziness, headache, confusion, incoordination and loss of consciousness. Higher exposures may result in fatality from gross overexposure. Ingestion may cause gastrointestinal irritation. Aspiration hazard! Small amounts aspirated into the lungs during ingestion or vomiting may cause lung injury, possibly leading to death. Symptoms of aspiration into the lungs include coughing, gasping, choking, shortness of breath, bluish discolored skin, rapid breathing and heart rate. Chemical pneumonitis from aspiration may result in fever. Pulmonary edema or bleeding, drowsiness, confusion, coma and seizures may occur in more serious cases. Symptoms may develop immediately or as late as 24 hours after the exposure, depending on how much chemical entered the lungs.

Inhalation or ingestion of 2-Ethyl Hexyl Nitrate may initially include cause nonspecific discomfort, such as nausea, headache, or weakness. Exposed workers reported throbbing headaches and heart palpitations. Data to evaluate the skin permeation hazard of this compound are insufficient. There are no reports of human sensitization. No adequate epidemiologic studies are available for this compound.

Eye contact with the product ingredients may cause eye irritation with discomfort, tearing, or blurring of vision. Direct exposure may cause skin irritation (redness, swelling). A single prolonged exposure may result in the material being absorbed through the skin in harmful amounts.

In general, overexposure to high atmospheric concentrations of alkyl-substituted aromatics may produce central nervous system depression, headache, dizziness, incoordination, nausea and loss of appetite. Aspiration (liquid enters the lung), may cause lung damage due to chemical pneumonia, a condition caused by petroleum-like solvents.

Minute amounts of petroleum hydrocarbons aspirated into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possible death.

Individuals with preexisting diseases of the kidneys or liver may have increased susceptibility to the toxicity of excessive exposures.

Section 4 – FIRST AID MEASURES

INHALATION:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT:

Flush skin with water after contact. Wash contaminated clothing before reuse.

EYES:

In case of contact immediately, flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION:

If swallowed, do not induce vomiting. Allow victim to rinse his mouth and then to drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person. Call a physician.



Section 5 – FIRE FIGHTING MEASURES

Flash Point (Method Used): 158.0° C (PMCC)

Flammability Limits: None known

EXTINGUISHING MEDIA:

Dry chemical, foam, halon, CO2, water spray (fog). Water stream may splash the burning liquid and spread fire.

SPECIAL FIRE FIGHTING PROCEDURES:

Use water spray to cool drums exposed to fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Oil soaked rags can cause spontaneous combustion if not handled properly. Before disposal, wash rags with soap and water and dry in well ventilated area. Firefighters should use a self-contained breathing apparatus to avoid exposure to smoke and vapor.

Section 6 – ACCIDENTAL RELEASE MEASURES/SPILL CLEAN-UP PROCEDURES

Remove sources of ignition, contain spill to smallest area possible. Stop leak if possible. Pick up small spills with absorbent materials such as paper towels, *Oil Dry*, sand or dirt. Recover large spills for salvage or disposal. Wash hard surfaces with safety solvent or detergent to remove remaining oil film. Greasy nature will result in a slippery surface.

Section 7 – HANDLING AND STORAGE

Store in closed containers between 50°F and 120°F. Keep away from oxidizing agents, excessive heat, and ignition sources. Store and use in well-ventilated areas.

Do not store or use near heat, spark, or flame, store out of sun. Do not puncture, drag, or slide this container. Drum is not a pressure vessel; never use pressure to empty.

Section 8 – EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

If vapors or mists are generated, wear a NIOSH approved organic vapor/mist respirator.

PROTECTIVE CLOTHING:

Safety glasses, goggles, or face shield are recommended to protect eyes from mists or splashing. PVC coated gloves are recommended to prevent skin contact.

OTHER PROTECTIVE MEASURES:

Employees must practice good personal hygiene, washing exposed areas of skin several times daily and laundering contaminated clothing before re-use.



Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point, 760 mm Hg:>200°C Volatiles, % by Volume: <2 Specific Gravity (H₂O=1): 0.88 Solubility in H₂O,
% by Volume: Insoluble
Vapor Pressure, mm Hg: <2 Evaporation Rate, Butyl Acetate=1: <1
Vapor Density, Air=: >1
Appearance and Odor: pale yellow liquid, mild odor

Section 10 – STABILITY AND REACTIVITY

GENERAL:

This product is stable and hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion produces carbon monoxide, carbon dioxide along with thick smoke.

Section 11 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Waste may be disposed of by a licensed waste disposal company. Contaminated absorbent material may be disposed of in an approved landfill. Follow local, state and federal disposal regulations.

Section 12 – TRANSPORT INFORMATION

DOT

Proper Shipping Name	Flammable Liquid, n.o.s (2-Ethylhexyl Nitrate, Heavy Aromatic Naphtha)
Hazard Class	3
UN No	NA 1993
Packing Group	III
Special Information	Flash Point: 70 degrees Celsius
Marine Pollutant	2-Ethylhexyl Nitrate
Reportable Quantity	No
DOT Label(s)	Combustible Liquid

IMO

Proper Shipping Name	Environmentally Hazardous Substance, n.o.s (2-Ethylhexyl Nitrate)
Hazard Class	9
UN No	3082
Packing Group	III
Marine Pollutant	2-Ethylhexyl Nitrate
Special Information	Flash Point: 70 degrees Celsius



Section 13 – OTHER INFORMATION

This information relates only to the specific material designated, and may not be valid for such material used in combination with any other materials or in any other process. Such information is to the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, expressed or implied, is made as to its accuracy, reliability or completeness, and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of its use. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

Responsibility for MSDS:

MSDS Coordinator
DSG Canada
Saskatoon, SK S7L 6Y6
(800) 667-6879 or
(306) 242-7644

Revised September 2007