



Safety Data Sheet

Issue Date: 30-Sept-2015

Revision Date: 2-Feb-2017

Version 1

1. IDENTIFICATION

Product Identifier

Product Name LUBRIGUARD DIESEL FUEL SUPPLEMENT WINTER EMERGENCY FORMULA

Other means of identification

SDS # LUB-027

Recommended use of the chemical and restrictions on use

Recommended Use After-market fuel additive

Details of the supplier of the safety data sheet

Supplier Address

Warren Oil Company, LLC
2340 U.S. 301 North
Dunn, NC 28335

Emergency Telephone Number

Company Phone Number 1-800-428-9284
Emergency Telephone (24 hr) CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture: Flammable Liquids: Category 3
Acute Toxicity (Oral): Category 4
Skin Corrosion / Irritation: Category 2
Serious Eye Damage/Eye Irritation: Category 1
Carcinogenicity: Category 2
Specific target organ toxicity (single exposure): Category 3 - Respiratory system, Narcotic effects
Specific target organ toxicity (repeated exposure): Category 1
Reproductive Toxicity: Category 2
Aquatic Toxicity (acute): Category 2

Label Elements:

Signal Word:
Pictogram:

Danger



GHS Hazard Phrases:

H226: Flammable liquid and vapor.
H302: Harmful if swallowed.
H315: Causes skin irritation.
H318: Causes serious eye damage
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness
H341: Suspected of causing genetic defects.
H351: Suspected of causing cancer.
H361: Suspected of damaging fertility or the unborn child.
H370: Causes damage to organs.
H372: Causes damage to organs through prolonged or repeated exposure.
H401: Toxic to aquatic life.

GHS Precaution Phrases:	<p>P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat / sparks / open flames / hot surfaces – NO smoking. P233: Keep container tightly closed. P240: Ground / bond container and receiving equipment. P241: Use explosion-proof equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P260: Do not breathe dust / fume / gas / mist / vapors / spray. P264: Wash hands thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves / protective clothing / eye protection / face protection. P362: Take off contaminated clothing and wash before reuse. P363: Wash contaminated clothing before reuse.</p>
GHS Response Phrases:	<p>P301 + P312 + P330: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse skin with water/shower. P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P312: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. P312: Call a POISON CENTER or doctor / physician if you feel unwell. P330: Rinse mouth. P331: Do NOT induce vomiting. P332 + P313: If skin irritation occurs, get medical advice / attention. P337 + P313: If eye irritation persists, get medical advice /attention. P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.</p>
GHS Storage and Disposal Phrases:	<p>P403 + P233: Store in a well ventilated place. Keep container tightly closed. P235: Keep cool. P405: Store locked up. P501: Dispose of contents/container to an approved waste disposal plant.</p>

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number	EC Number	Index Number	Hazardous Components (Chemical Name)	Concentration
27247-96-7	248-363-6	N/A	2-Ethylhexyl Nitrate	65 – 40%
71-36-3	200-751-6	603-004-00-6	n-Butanol	30 – 35 %
67-63-0	200-661-7	603-117-00-0	Isopropyl alcohol	10 – 15%
104-76-7	203-234-3	N/A	2-Ethylhexanol	5 – 10%
64742-94-5	265-198-5	649-424-00-3	Solvent Naphtha, Heavy Aromatic	2 – 5%
60-33-3	200-470-9	NA	Linoleic acid	2 – 5%
112-80-1	204-007-1	NA	Oleic acid (TOFA)	< 1%
64742-95-6	265-199-0	649-356-00-4	Solvent Naptha, Light Aromatic	< 0.5%
91-20-3	202-049-5	601-052-00-2	Naphthalene	< 0.05%

4. FIRST-AID MEASURES

In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration and contact a physician immediately. If breathing is difficult, administer oxygen and contact a physician immediately.
In Case of Skin Contact:	Wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash clothing separately before reuse.
In Case of Eye Contact:	Immediately flush with plenty of water, alternately lifting the upper and lower eyelids. If appropriate, after 5 minutes, remove contact lenses and continue flushing the eyes for an additional 15 minutes. Get medical attention if irritation persists.

In Case of Ingestion:	If swallowed, do NOT induce vomiting, but have the victim rinse mouth with water, and then drink 2-4 cups of water. Get immediate medical attention. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Note To Physician:	Activated charcoal mixture may be administered. To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mls of water and mix thoroughly. Administer 5 ml/kg or 350 ml for an average adult. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk justified by the presence of additional toxic substances. Activated charcoal may induce vomiting, but may be given after emesis or lavage to absorb toxic additives. Steroid therapy in mild to moderate cases does not improve outcome. Bacterial pneumonia often occurs after exposure, but prophylactic antibiotics are not indicated and should be reserved for documented bacterial pneumonia. Light hydrocarbons have been associated with cardiac sensitization in abuse situations. Hypoxia or the injection of adrenaline-like substances enhanced these effects.

5. FIRE-FIGHTING MEASURES

Flash Point:	30 °C (86 °F)
Explosive Limits:	When heated above 100 °C, may undergo a self-accelerating, exothermic reaction which causes a rapid rise in temperature and pressure. Rupture of storage vessels and fire should be anticipated in case of such temperatures. Spray storage vessels with water to maintain temperature below 100 C.
Autoignition Point:	Not determined
Suitable Extinguishing Media:	Dry chemical, water spray (fog), carbon dioxide, foam.
Fire Fighting Instructions:	As in any fire, wear self-contained breathing apparatus pressure-demand MSHA / NIOSH (approved or equivalent) and full protective gear.
Flammable Properties And Hazards:	Flammable liquid. Vapors will burn releasing toxic vapors, fumes and smoke, including carbon monoxide and organic vapors. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture or explosion.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment And Emergency Procedures:	Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Eliminate all ignition sources. Keep unnecessary and unprotected personnel from entering.
Environmental Precautions: Steps To Be Taken In Case Material Is Released Or Spilled:	<p>Initial Containment: Eliminate all sources of ignition – heat, sparks, flame, electricity, and impact. Contain spilled material with dikes or absorbents. Marine Pollutant. Do not allow material to enter soil, surface water, or sewer system.</p> <p>Large Spills Procedure: Stop the source of the leak, if it is safe to do so. Contain spilled material. Vacuum or sweep up material and place in a disposal container. Absorb residue with inert material (e.g. dry sand or earth) then place in a chemical waste container. Do not flush to sewer. Use explosion-proof equipment during clean-up.</p> <p>Small Spills Procedure: Absorb spills with inert material. Transfer to a chemical waste container and dispose of properly. Spills are extremely slippery and should be cleaned up immediately.</p> <p>Miscellaneous: Treat or dispose of in accordance with all federal, state, and local requirements.</p>

7. HANDLING AND STORAGE

Precautions To Be Taken In Handling:	Ground and bond containers when transferring material. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Keep away from food and drinking water. Secure container after each use. Store in a cool dry, secure area. Keep out of reach of children. Ground containers when transferring material. Avoid contact with strong oxidizing agents. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.
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Precautions To Be Taken In Storing: Store in a tightly closed container. Store in a cool dry place. Eliminate all sources of ignition – heat, sparks, flame, electricity, impact and friction. Contact with hot surfaces may ignite the product.

Other Precautions:

DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves be sufficient. Review all operations that may have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitating, and vacuum truck operations) and use appropriate mitigating procedures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

n-Butanol	ACGIH TWA: 20 ppm, OSHA PEL: 100 ppm
Isopropyl alcohol	OSHA TWA: 400 ppm; ACGIH TWA: 200 ppm; STEL: 400 ppm
Solvent Naphtha, Heavy Aromatic	OSHA PEL 100 ppm, 400 mg/m ³ ; TWA value 100 ppm, 400 mg/m ³
Oleic acid (TOFA)	OSHA TWA: 5 mg/m ³ (oil mist) / ACGIH TWA: 5mg/m ³ (oil mist); ACGIH TWA: 3 mg/m ³ (respirable); 10 mg/m ³ (inhalable)
Naphthalene	OSHA PEL: 10 ppm, 50 mg/m ³ , OSHA TWA: 10 ppm, 50 mg/m ³ , ACGIH TWA: 10 ppm, 52 mg/m ³ , OSHA STEL: 15 ppm, 75 mg/m ³ , ACGIH STEL: 15 ppm, 79 mg/m ³ (on California Proposition 65 list)

Respiratory Equipment (Specify Type):

Under normal use conditions, with adequate ventilation, no special handling equipment is required. If anticipating close contact with this product or its mist, local ventilation may be required to keep exposure below limits.

Eye Protection:

Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection:

Wear protective gloves to minimize skin contamination. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material. Wash hands thoroughly after handling.

Engineering Controls (Ventilation, etc.)

Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Appearance (Color):	Clear, amber (2.5-3.0)
Odor:	Strong, alcohol odor
Odor Threshold:	Not determined
Melting Point:	Not determined
Pour Point:	<-30 °F
Boiling Point:	Not determined
Autoignition Point:	Not determined
Flash Point:	30 °C (86 °F)
Explosive Limits:	Not determined
Upper / Lower Flammability or Explosive Limits:	Not determined
Specific Gravity (Water = 1):	0.882 @ 60 °F (16 °C)
Vapor Pressure (vs. Air or mm Hg):	Not determined
Vapor Density (vs. Air = 1):	Not determined
Relative Density:	7.36 lbs/gal
Evaporation Rate:	Not determined
Solubility in Water:	Negligible
pH:	Not determined
Percent Volatile:	Not determined

Partition Coefficient: n-octanol / water :	Not determined
Decomposition Temperature:	Not determined
Viscosity (@ 100 °F; cSt)	2.36
Viscosity (@ 70 °F; cSt)	3.33
Viscosity (@ 0 °F; cSt)	15.66
Viscosity (@ -10 °F; cSt)	20.08

10. STABILITY AND REACTIVITY

Stability:	Stable under ordinary conditions of use and storage.
Incompatibility – Materials To Avoid:	Avoid contact with strong oxidizing agents, such as nitric and sulfuric acids, halogens, hydrogen peroxide and chlorinating agents.
Hazardous Decomposition or Byproducts:	In the case of fire, a complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide, smoke and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Sources of ignition and temperature above 50 °C (122 °F) – 60 °C (140 °F).

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Harmful if swallowed.
Potential Health Effects:	Irritation to eyes, skin, nose, throat; burning sensation in chest, headache, nausea, lassitude (weakness, exhaustion), restlessness, incoordination, confusion, drowsiness; vomiting, diarrhea; dermatitis; chemical pneumonitis (aspiration liquid).
Skin Corrosion Property/Stimulativeness:	Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.
Eye Critical Damage/Stimulativeness:	Contact with eyes may cause irritation.
Ingestion:	Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.
Inhalation:	Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure and death. WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.
Generative Cell Mutagenicity: Respiratory Organs Sensitization/Skin Sensitization: Carcinogenicity:	This material has been positive in a mutagenicity study. This product is not reported to have any skin sensitization effects. Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation. Fuels, diesel, no. 2 (68476-34-6) ACGIH: A3 – Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Diesel Fuel)

12. ECOLOGICAL INFORMATION

Ecotoxicity:	General Product Information – Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations. Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment. The product hasn't been tested. The statement derived from the properties of the individual components.
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available
Mobility in Soil:	No data available.
PBT/VPvB Assessment:	No data available.
Other Adverse Effects:	No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:	Do not dispose of into waste water treatment facilities. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements. This material, if discarded, is considered a hazardous waste under RCRA Regulation 40 CFR 261.
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14. TRANSPORT INFORMATION

UN Number:	UN1993
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S. (Contains 2-Ethylhexyl nitrate)
Packing Group:	III
Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)	
Transport Hazard Class(es):	3*
Maritime Transport IMDG/GGVSea	
Transport Hazard Class(es):	3
Marine Pollutant:	Yes**
Air Transport ICAO-TI and IATA-DGR	
Transport Hazard Class(es):	3

*This material is not regulated for US DOT transportation in quantities less than 119 gallons per 49 CFR 173:120 (b)(1). Does not apply to transportation by vessel, aircraft or package shipping services.

**This material is a marine pollutant when shipped in quantities greater than 119 gallons.

15. REGULATORY INFORMATION

EPCRA 311/312 Categories:	<ol style="list-style-type: none"> 1. Immediate (Acute) Health Effects: Yes 2. Delayed (Chronic) Health Effects: Yes 3. Fire Hazard: Yes 4. Sudden Release of Pressure Hazard: No 5. Reactivity Hazard: No
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State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Components	CAS Number	State Right-to-Know				
		NJ	PA	MA*	MN	RI
2-Ethylhexanol	104-76-7	No	Yes		No	No
Solvent Naphtha, Heavy Aromatic	64742-94-5	No	No		No	No
Solvent Naptha, Light Aromatic	64742-95-6	No	No		No	No
Isopropyl alcohol	67-63-0	Yes	Yes		Yes	Yes
2-Ethylhexyl Nitrate	27247-96-7	No	No		No	No
Linoleic acid	60-33-3	No	No		No	No
Oleic acid	112-80-1	No	Yes		No	Yes
1-Butanol	71-36-3	Yes	Yes	Yes	Yes	Yes
Naphthalene	91-20-3	Yes	Yes		Yes	Yes

* Massachusetts: All known ingredients of this product which could be on the Massachusetts Right-to-Know list are fully disclosed in the “chemical ingredients” section of this SDS.

Proposition 65 (California): **⚠WARNING:** This product can expose you to chemicals including Naphthalene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov (<http://www.p65warnings.ca.gov/>).

Components	CAS Number	Canadian Disclosure List	Clean Air Act – Section 112 SC Toxic Air Pollutants List	Title V
2-Ethylhexanol	104-76-7	Yes		
Solvent Naphtha, Heavy Aromatic	64742-94-5			
Solvent Naptha, Light Aromatic	64742-95-6			
Isopropyl alcohol	67-63-0		Yes	Yes
2-Ethylhexyl Nitrate	27247-96-7		No	No
Linoleic acid	60-33-3			
Oleic acid	112-80-1			
1-Butanol	71-36-3		Yes	Yes
Naphthalene	91-20-3	Yes	Yes	Yes

Components	CAS Number	Section 302 (EHS) TPQ	Section 304 EHS RQ lbs	CERCLA RQ lbs	Section 313	RCRA CODE	CAA 112(r) TQ
2-Ethylhexanol	104-76-7						
Solvent Naphtha, Heavy Aromatic	64742-94-5						
Solvent Naptha, Light Aromatic	64742-95-6						
Isopropyl alcohol	67-63-0				313		
2-Ethylhexyl Nitrate	27247-96-7						
Linoleic acid	60-33-3						
Oleic acid	112-80-1						
1-Butanol	71-36-3			5,000	313	U031	
Naphthalene	91-20-3			100	313	U165	

16. OTHER INFORMATION

Hazardous Rating System:



Issue Date: 02-Sept-2015
Revision Date: 02-Feb-2017
Revision Note: New formula

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.

End of Safety Data Sheet