SAFETY DATA SHEET
Lloyds Laboratories Inc.
Nanolube Diesel Fuel Treatment – Part #72501, 72520

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND OF THE COMPANY

Identification of Preparation: Nanolube Diesel Fuel Treatment

Date of Safety Data Sheet: March 14, 2018

Use of Preparation: Ethanol Fuel Treatment.

Company Identification:
Lloyds Laboratories Inc.
613 Neal Drive
Peterborough
Ontario
K9J 6X7

Company Telephone Number: 800 361-6766

24 Hour Telephone Number: CANUTEC 613-996-6666 or *666 for cell phone.

2. HAZARD IDENTIFICATION

Emergency Overview:
OSHA / WHMIS 2015 Hazards
Classification of substance or mixture
GHS-US/Canadian classification:
GHS Hazards
Flammable Liquid Category 3.
Aspiration Hazard Category 1.
Skin Irritant Category 2.
Eye Irritation Category 2A.
Label Elements
GHS Labeling
Hazard Pictograms (GHS):

Signal Word (GHS): Danger!
Hazard Statements (GHS):
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.

H315 Causes shin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements (GHS):

P210 Keep away from heat/open flames/sparks/hot surfaces-No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P242 Use non sparking tools.
P241 Use explosion proof electrical/ventilating/lighting...equipment.
P243 Take precaution measures against static discharge.
P260 Do not breathe gas/vapours.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well ventilated area.
P403+P233+P235 Store in a well ventilated place. Keep container tightly closed. Keep cool.

Response (GHS):

P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALLED: Remove person to fresh air and keep comfortable breathing.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Description: Chemical.

Ingredient	CAS#	% by Wt	Classification
Stoddard solvent	8052-41-3	80-100	Flammable Liquid Category 3 – H226 Aspiration Hazard Category 1 – H304
Nonane	111-84-2	1-5	Flammable Liquid Category 3 – H226 Aspiration Hazard Category 1 – H304
Benzene, 1,2,4-trimethyl-	95-63-6	1-5	Flammable Liquid Category 3 – H226 Aspiration Hazard Category 1 – H304

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If symptoms persist consult physician.

Eye Contact: Remove contacts. Flush with water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin Contact: Thoroughly wash exposed skin with soap and water. Remove any contaminated clothing and wash before reuse.

Ingestion: Wash out mouth with water. Drink plenty of water. Do not induce vomiting unless directed by medical personnel. Never give anything to an unconscious person. Get medical aid.

Notes to Physician: Treatment based on judgment of attending physician.

Most important symptoms and effects, both acute and delayed: May cause drowsiness or dizziness. Causes skin irritation. May be fatal if swallowed and enters airways.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Water spray or fog, foam, dry chemical, CO2.

Unsuitable extinguishing media: None known.

Special exposure hazards: Fire or excessive heat may produce hazardous decomposition products.

Special safety equipment: Self-contained positive pressure breathing apparatus and protective clothing.
Fire and explosion: Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.
Further information: Keep containers and surroundings cool with water spray.

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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe mist or vapour.
For Non-Emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).
Emergency Procedures: Evacuate unnecessary personnel.
For Emergency Personnel
Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Ventilate area.
Environmental Precautions
Prevent entry to sewers and public waters.
Methods and Material for Containment and Cleaning Up
For Containment: Contain any spills with dikes to prevent migration and entry into sewers or streams.
Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely.
Reference to Other Sections: See Heading 8. Exposure controls and personal protection.

7. HANDLING AND STORAGE

Precautions for safe handling:
Put on appropriate personal protective equipment (see Section 8). Do not swallow. 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 only non-sparking tools. Take precautionary measures

against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Non equilibrium conditions may increase the fire hazard associated with this product. Always bond receiving containers to the fill pipe before and during loading. Always confirm that receiving container is properly grounded. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards. Carefully review operations that may increase the risks such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. In addition to bonding and grounding, efforts to mitigate the hazards may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Always keep nozzle in contact with the container throughout the loading process. Do NOT fill any portable container in or on a vehicle.

Information about fire - and explosion protection:
Keep respiratory protective device available.
No special measures required.

Conditions for safe storage, including any incompatibilities

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. Store locked up. 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. Store in original container, keep closed in a secure location.

Requirements to be met by storerooms and receptacles:
Store in a cool location.

Information about storage in one common storage facility:
Store away from foodstuffs.

Further information about storage conditions:
Store in cool, dry conditions in well sealed receptacles.
Store receptacle in a well ventilated area.
Keep container tightly sealed.

Specific end use(s): No further relevant information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection:	Use local exhaust or dilution ventilation.
Hand protection:	Chemical resistant gloves.
Eye protection:	Safety goggles.
Skin protection:	Use body-covering clothing.
Working hygiene:	Take usual precautions when handling. Workers should wash hands before eating, drinking or smoking.
Exposure Guidelines:	
Stoddard solvent.	ACGIH TWA TLV 100 mg/m^3

9. PHYSICAL AND CHEMICAL PROPERTIES

Molecular Weight:	No data available.	**Evaporation Rate (BuAc=1):**	No data available.
Appearance:	Light blue liquid.	**Vapour Density (Air=1):**	No data available.
Odour:	Moderate hydrocarbon like.	**Specific Gravity:**	0.80 g/cm3 estimate.
Odour Threshold:	No data available.	**Solubility in Water:**	Forms emulsion.

pH:	No data available.	**Log Pow (calculated):**	No data available.
Melting Point:	No data available.	**Autoignition Temperature:**	No data available.
Boiling Point/Range:	No data available.	**Decomposition Temperature:**	No data available.
Flash Point:	43 C.	**Viscosity:**	No data available.
Flammable Limits in Air:		**Percent Volatile by Volume:**	No data available.
Lower Explosion limit:	0.8 %.		
Upper Explosion limit:	5.6 %.		

10. STABILITY AND REACTIVITY

Reactivity	Stable at normal ambient temperature and pressure.
Chemical stability	No decomposition if stored and applied as directed. Highly flammable liquid and vapour. May form flammable/explosive vapour air mixture.
Conditions to avoid	Keep away from heat and sources of ignition. Extremely high or low temperatures.
Hazardous decomposition products	Hazardous gases and vapours produced in fire are oxides of carbon.
Materials to avoid	Oxidizing agents. Oxygen. Chlorine. Fluorine.
Hazardous polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity:
LD/LC50 values relevant for classification
Routes of Entry Inhalation, ingestion, eye or skin contact.
Stodard Solvent.
LD50 oral rat 2000 mg/kg;
LC50 dermal rabbit 5000 mg/kg.
Carcinogenicity:
Chemical Name CAS Number IARC NTP OSHA
No ingredient listed.
Chronic Effects:
Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No data available for mixture.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: No information available.
Chronic: Hexane may cause damage to organs through prolonged or repeated exposure.

12. ECOLOGICAL INFORMATION

Toxicity:	Not classified.
Persistence and Degradability:	Not established.
Bioaccumulative Potential:	Not established.

Mobility in Soil:	Not established.
Other Adverse Effects:	
Other Information:	Avoid release to the environment.
Aquatic Toxicity:	Toxic to aquatic organisms.
Toxicity to algae, fish invertebrates:	No data available.
Biodegradation:	No data available. Would not be expected to be biodegradable based on ingredients.

13. DISPOSAL

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.
Ecology – Waste Materials: Avoid release to the environment.
Empty Containers: Empty containers retain product residue (liquid and/or vapour) and can be dangerous. **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.** Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum re-conditioner, or properly disposed.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT):
Under 1 litre can be shipped Limited Quantity.
Class 3, flammable liquid, UN 1993, n.o.s. (contains Isopropyl Alcohol and Distillates Petroleum hydrotreated light) PGII.

Canadian TDG (Road & Rail):
Under 1 litre can be shipped Limited Quantity.
Class 3, flammable liquid, UN 1993k, n.o.s. (contains Isopropyl Alcohol and Distillates Petroleum hydrotreated light) PGII.

15. REGULATION

Occupational Health & Safety Regulations:
OSHA Hazards: Combustible liquid.
WHMIS Classification:
Class D - Division 2 B.
Class B – Division 3.
Canadian Domestic Substance List (DSL): Listed.

HMIS III Rating:

Health: 2.

Flammability: 3.

Physical: 0.

Personal Protection: B.
SDS US (GHS HazCom 2012).
SDS CDN (GHS WHIMS 2015).

16. OTHER INFORMATION

Prepared By: Technical Department

Issuing Date: May 22, 2018

Disclaimer:
The manufacturer warrants that this product conforms to its standard specification when used according to direction. To the best of our knowledge the information contained herein is accurate. However we do not assume accuracy or completeness of the information contained herein.

Final determination of the 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.

End of Safety Data Sheet