SAFETY DATA SHEET

1. Identification

Identification

Product name: **AirLube DE-30**

Additional identification

Chemical name: Mixture

Recommended use and restriction on use

Recommended use: Not determined.

Restrictions on use: Not determined.

Details of the supplier of the safety data sheet

Supplier

Gardner Denver
1800 Gardner Expressway,
Quincy, IL 62301
United States of America
Ph: 217-222-5400

Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300 (LUBRIZOL)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Toxic to reproduction	Category 2

Unknown toxicity

Acute toxicity, oral	0.0 %
Acute toxicity, dermal	0.0 %
Acute toxicity, inhalation, vapor	85.2 %
Acute toxicity, inhalation, dust or mist	85.2 %

Label Elements:

Hazard Symbol:

Signal Word: Warning

Hazard Statement: Suspected of damaging fertility or the unborn child.

Precautionary Statement:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

Response: If exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None identified.

3. Composition/information on ingredients

Chemical name	CAS number	Percent by Weight
Alkaryl amine	Confidential	1 - 5%
Tricresyl phosphate	1330-78-5	0.5 - 1%
Diphenylamine	122-39-4	0.1 - 0.5%

Trade secret information: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

General information: IF exposed or concerned: Get medical advice/attention.

Ingestion: Treat symptomatically. Get medical attention.

Inhalation: Remove exposed person to fresh air if adverse effects are observed.

Skin Contact: Wash with soap and water. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.

Most important symptoms/effects, acute and delayed

Symptoms: See section 11.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards: Use water to cool containers exposed to fire.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	CO_2, dry chemical, foam, water spray, water fog.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical:	A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Recommend wearing self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas.
Methods and material for containment and cleaning up:	Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.
Environmental Precautions:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Observe good industrial hygiene practices. Provide adequate ventilation. Use personal protective equipment as required. Launder contaminated clothing before reuse. Avoid environmental contamination. Keep container closed when not in use and use with adequate ventilation. Wash thoroughly after handling. Empty container contains product residue which may exhibit hazards of product.
Maximum Handling Temperature:	Not determined.
Conditions for safe storage, including any incompatibilities:	Store away from incompatible materials. See section 10 for incompatible materials.
Maximum Storage Temperature:	Not determined.

8. Exposure controls/personal protection

Control Parameters:

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate engineering controls: No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: If contact is likely, safety glasses with side shields are recommended.

Skin Protection

Hand Protection: Use nitrile or neoprene gloves. Use good industrial hygiene practices. In case of skin contact, wash hands and arms with soap and water. Suitable gloves can be recommended by the glove supplier.

Other: Gloves, coveralls, apron, boots as necessary to minimize contact. Long sleeve shirt is recommended.

Respiratory Protection: Use respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus (SCBA) for entry into a confined space as the natural decomposition of this material will lower the available oxygen in the air. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

Hygiene measures: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless to yellow
Odor:	Mild
Odor threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	480.0 °F (248.9 °C) (Cleveland Open Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.

Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	0.93 68 °F (20 °C)
Solubility(ies)	
Solubility in water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of Hazardous Reactions:	Will not occur.
Conditions to Avoid:	Do not expose to excessive heat, ignition sources, or oxidizing materials.
Incompatible Materials:	Strong acids. Strong bases. Strong oxidizing agents.
Hazardous Decomposition Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Information on toxicological effects

Acute toxicity

Oral

Product: Ingestion can cause central nervous system effects such as headache, dizziness, drowsiness, and generalized weakness. ATEmix > 10.000 mg/kg.

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: Not classified for acute toxicity based on available data.

Skin Corrosion/Irritation:

Product: Not classified as a primary skin irritant.

Serious Eye Damage/Eye Irritation:

Product: Remarks: Not classified as a primary eye irritant.

Respiratory sensitization:

No data available

Skin sensitization:

Diphenylamine	Classification: Not a skin sensitizer. (Literature)

Specific Target Organ Toxicity - Single Exposure:

Tricresyl phosphate	If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.
Diphenylamine	Exposure to a high concentration of vapor or mist may be irritating.

Aspiration Hazard:

No data available

Other effects:

Diphenylamine	Kidney Blood Liver

Chronic Effects

Carcinogenicity:

No data available

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity:

Alkaryl amine	This material has not exhibited mutagenic or genotoxic potential in laboratory tests.
Diphenylamine	The Ames Salmonella test for mutagenicity was negative for this product. The mouse micronucleus and the rat hepatocyte UDS tests for genotoxicity were negative for diphenylamine.

Reproductive toxicity:

Tricresyl phosphate	Suspected of damaging fertility. This material has been shown to impair fertility and cause adverse reproductive effects in rats and mice.

Diphenylamine	There are conflicting reports in the literature concerning the teratogenicity of diphenylamine. However, because the predominant route of exposure was oral (via gavage or diet) and relatively high dose levels were administered in the studies where positive effects were observed, it would not seem to present a workplace hazard.
Carboxylic ester	Not Classified based on available data.

Specific Target Organ Toxicity - Repeated Exposure:

Tricresyl phosphate	Repeated occupational exposure to tricresyl phosphate over a prolonged period of time may cause delayed neurotoxicity characterized by ataxia and tremors.
Diphenylamine	A two year feeding study in rats and dogs of diphenylamine demonstrated liver, kidney and blood cell damage. The effect was observed at levels as low as 100 ppm. A five month feeding study in rats of 1% diphenylamine produced renal cystic disease. A dose-dependent increase in Heinz body formation was evident during a 12 week study of 5 to 1000 ppm. The no effect level was at 10 ppm. Dermal: Target Organ(s): Liver, Kidney Inhalation: Target Organ(s): Kidney, Liver Oral: Target Organ(s): Liver, Kidney

12. Ecological information

Ecotoxicity

Fish

Alkaryl amine	LC 50 (Zebra Fish, 4 d): > 100 mg/l
Tricresyl phosphate	LC 50 (Rainbow Trout, 4 Days): 0.6 mg/l NOEC (Rainbow Trout, 4 Days): 0.56 mg/l
Diphenylamine	LC 50 (Not reported, 2 d): 2.2 mg/l

Aquatic Invertebrates

Alkaryl amine	EC 50 (Water flea (Daphnia magna), 2 d): > 100 mg/l
Tricresyl phosphate	EC 50 (Water flea (Daphnia magna), 2 d): 0.146 mg/l
Diphenylamine	EC 50 (Water flea (Daphnia magna), 2 d): 0.31 mg/l

Toxicity to Aquatic Plants

Alkaryl amine	EC 50 (Green algae (Selenastrum capricornutum), 3 d): 600 mg/l
Tricresyl phosphate	EC 50 (Alga, 3 Days): 0.4042 mg/l
Diphenylamine	EC 50 (Green algae (Selenastrum capricornutum), 3 d): 1.51 mg/l

Toxicity to soil dwelling organisms

No data available

Sediment Toxicity

No data available

Toxicity to Terrestrial Plants

No data available

Toxicity to Above-Ground Organisms

No data available

Toxicity to microorganisms

Alkaryl amine	EC 50 (Sludge, 0.1 d): > 1,000 mg/l
Tricresyl phosphate	LC 50 (Sludge, 0.1 Days): > 1,000 mg/l

Persistence and Degradability

Biodegradation

Alkaryl amine	OECD TG 301 B, 0 %, 28 d, Not readily degradable.
Tricresyl phosphate	OECD TG 301 D, 24.2 %, 28 d, Not readily degradable.
Diphenylamine	OECD TG 301 D, 26 %, 28 d, Not readily degradable.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Alkaryl amine	Bioconcentration Factor (BCF): 1,584.89 (Measured)

Partition Coefficient n-octanol / water (log Kow)

Alkaryl amine	Log Kow: 3.6 (Measured)
Tricresyl phosphate	Log Kow: 5.93 (Measured)
Diphenylamine	Log Kow: 3.4 (calculated)

Mobility:

No data available

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

Contaminated Packaging: Container packaging may exhibit hazards.

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None known.

Shipping descriptions may vary based on mode of transport, quantities ,temperature of the material, package size, and/or origin and destination It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory information

US Federal Regulations

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

Chemical Identity	Reportable quantity
Diphenylamine	De minimis concentration: 0.1%

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Chronic
(Delayed)

SARA 302 Extremely Hazardous Substance
SARA 304 Emergency Release Notification
SARA 311/312 Hazardous Chemical
SARA 313 (TRI Reporting)
This product may contain chemical(s) regulated under the Superfund Amendments and Reauthorization Act (SARA). For additional information please contact Lubrizol Customer Assistance: America(s): AmerLZAMCustomerAssistance@Lubrizol.com ; Europe: EMEAICustomerAssistance@Lubrizol.com ; Asia: APCustomerAssistance@Lubrizol.com

US State Regulations

US. California Proposition 65
No ingredient regulated by CA Prop 65 present.

Inventory Status

Australia (AICS)
All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)
All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

China (IECSC)
All components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union (REACh)
To obtain information on the REACH compliance status of this product, please visit Lubrizol.com/REACH, or e-mail us at REACH_MSDS_INQUIRIES@Lubrizol.com

Japan (ENCS)
All components are in compliance with the Chemical Substances Control Law of Japan.

Korea (ECL)
All components are in compliance in Korea.

New Zealand (NZIoC)
All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS)
All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)
All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

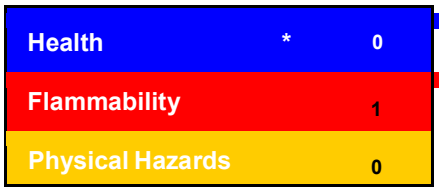
Taiwan (TCSCA)
All components of this product are listed on the Taiwan inventory.

United States (TSCA)
All components of this material are on the US TSCA Inventory.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

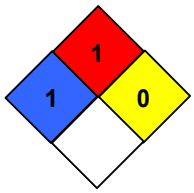
16.Other information, including date of preparation or last revision

HMIS Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date:	03/09/2015
Version #:	1.0
Source of information:	Internal company data and other publically available resources.
Further Information:	Contact supplier (see Section 1)
Disclaimer:	As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.