

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

1.1 Product Identifier:

Product ID: D-A Cross Transformer Oil **Revision Date:** Sep 09, 2016
Product Name: D-A Cross Transformer Oil **Version:** 1.0

1.2 Relevant Identified Uses of the Substance or Mixture:

Electrical insulating oil.

Date Printed: Dec 26, 2017
Supersedes Date: N.A.

1.3 Details of the Supplier of the Safety Data Sheet:

Suppliers's Name: D-A Lubricant Company, Inc.
Address: 801 Edwards Drive, Lebanon, IN 46052
Information Phone Number: T 317-923-5321, Toll-Free 1-800-873-2582

1.4 Emergency Information: CHEMTREC
Emergency Phone: (800) 424-9300 (24 Hours)

SECTION 2) HAZARDS IDENTIFICATION

2.1 Classification

Acute aquatic toxicity - Category 3
Aspiration Hazard - Category 1
Chronic aquatic toxicity - Category 3

2.2 Label Elements

Pictograms



Signal Word

danger

Hazardous Statements - Health

H304 - May be fatal if swallowed and enters airways

Hazardous Statements - Environmental

H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.

Precautionary Statements - Prevention

P273 - Avoid release to the environment.

Precautionary Statements - Response

P391 - Collect spillage.
P301 + P331 - IF SWALLOWED: Do NOT induce vomiting.

Precautionary Statements - Storage

P405 - Store locked up.

Precautionary Statements - Disposal

P501 - Dispose of contents/container in accordance with local/national/international regulations.

2.3 Other hazards

No Data Available

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

CAS	Chemical Name	GHS Classifications	% By Weight	EC No
0064742-53-6	MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) LIGHT NAPHTHENIC	Asp. Tox. 1, H304; Carc. 1, H350	77% - 100%	265-156-6
0000128-39-2	2,6-DI-T-BUTYLPHENOL	Eye Irr. 2, H319; Acute Tox. Oral 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. Derm. 4, H312; Skin Irr. 2, H315	0.0% - 0.3%	-

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

4.1 Description of measures

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Skin Contact

Rinse/wash with lukewarm, gently flowing water and mild soap for 5 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

Ingestion

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

If more than several mouthfuls have been swallowed, give two glasses of water (16 Oz.).

Notes

High velocity injection of grease under the skin may result in serious injury. If left untreated, the affected area is subject to infection, disfigurement, lack of blood circulation and may require amputation. When dispensed by high-pressure equipment, this material can easily penetrate the skin and leave a bloodless puncture wound. Material injected into a finger can be deposited into the palm of the hand and in rare occasions up to the elbow. Within 24 to 48 hours the patient may experience swelling, discoloration, and throbbing pain in the affected area. Immediate treatment by a surgical specialist is recommended.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5) FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide, water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous

use of foam and water on the same surface is to be avoided as water destroys the foam. Water or foam may cause frothing. If leak or spill has not ignited, use water spray to cool the containers and to provide protection for personnel attempting to stop the leak.

Unsuitable Extinguishing Media

Do not use water in a jet.

5.2 Specific Hazards Arising from the substance of mixture

Hazardous combustion products may include: Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones.

5.3 Advice for firefighters

Fire-Fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray or fog may be useful in minimizing or dispersing vapors and to protect personnel.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Emergency Procedure

Immediately turn off or isolate any source of ignition. Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Clean up immediately. Contain spill. Wipe up or add suitable absorbent, non-combustible, inert material such as sand, sawdust, etc. to spill area and shovel into appropriate container for disposal. Local authorities should be advised immediately if required or if significant spillages cannot be contained.

Ventilate area.

Recommended Equipment

Positive pressure, full-facepiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions

Avoid breathing vapor or mist. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Will not produce vapors unless heated to temperatures of ~300 °F.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains/surface waters/ groundwater. Retain and dispose of contaminated wash water.

SECTION 7) HANDLING AND STORAGE

7.1 Precautions for safe handling

General

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

7.2 Conditions for safe storage, including incompatibilities

Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous.

Minimum feasible handling temperature should be maintained. Periods of exposure to high temperature should be minimized. Water

contamination should be avoided.

7.3 Specific end use(s)

No Data Available.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Chemical Name	IOELV TWA (ppm)	IOELV TWA (mg/m3)	IOELV STEL (ppm)	IOELV STEL (mg/m3)	IOELV Notations	IOELV Directive	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	ACGIH TWA (ppm)
No applicable chemical	-	-	-	-	-	-	-	-	-	-	-	-

Chemical Name	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH Carcinogen	ACGIH Notations	ACGIH TLV Basis
No applicable chemical	-	-	-	-	-	-

8.2 Exposure controls

Eye Protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours.

Supplied air respiratory protection should be used for cleaning large spills or upon entry into tanks, vessels, or other confined spaces.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of gas, vapors or dusts below their respective threshold limit value.

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical and Chemical Properties

Density 7.43 lb/gal

Specific Gravity 0.89

Appearance Clear; light amber to dark liquid

Odor Threshold N.A.

Odor Description Mild hydrocarbon odor

pH N.A.

Water Solubility Insoluble

Flammability	Flash Point at or above 200 °F
Flash Point Symbol	N.A.
Flash Point	152.0 °C (305.6 °F)
Viscosity	9.15 cSt @ 40°C (104°F)
Lower Explosion Level	N.A.
Upper Explosion Level	N.A.
Vapor Pressure	0 mmHg (Calculated @ 20 C/68 F)
Vapor Density	1+
Pour Point	-46.0 °C (-50.8°F)
Melting Point	N.A.
Low Boiling Point	392 °F
High Boiling Point	794 °F
Auto Ignition Temp	N.A.
Decomposition Pt	N.A.
Evaporation Rate	N.A.
Coefficient Water/Oil	N.A.

SECTION 10) STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable

10.4 Conditions to avoid

Avoid all possible sources of ignition, heat, sparks, flame, build up of static electricity and contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous Decomposition Products

Evolves toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones when heated to combustion.

SECTION 11) TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

No Data Available

Aspiration Hazard

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

May be fatal if swallowed and enters airways

Carcinogenicity

The highly refined mineral oil contains <3% DMSO extract as measured by IP 346, hence the classification of a carcinogen need not apply.

No Data Available

Germ Cell Mutagenicity

No Data Available

Reproductive Toxicity

No Data Available

Respiratory/Skin Sensitization

No Data Available

Serious Eye Damage/Irritation

No Data Available

Skin Corrosion/Irritation

No Data Available

Serious Eye Damage/Irritation

Irritating, but will not permanently injure eye tissue.

Skin Corrosion/Irritation

Prolonged or repeated contact may cause skin irritation.

Specific Target Organ Toxicity - Repeated Exposure

No Data Available

Specific Target Organ Toxicity - Single Exposure

No Data Available

0064742-53-6 MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) LIGHT NAPHTHENIC

LC50 (Rodent - rat , Inhalation) : 2180 mg/m3 (4 hours exposure) Toxic effects : Lungs, Thorax, or Respiration - structural or functional change in trachea or bronchi.

LD50 (Rodent - rat, Oral) : >5000 mg/kg, Toxic effects : Behavioral - somnolence (general depressed activity).

LD50 (Rodent - rabbit, Administration onto the skin) : >2000 mg/kg, Toxic effects : Skin and Appendages - primary irritation (after topical exposure)

SECTION 12) ECOLOGICAL INFORMATION

12.1 Toxicity

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

This product is not toxic to fish but may coat gill structures resulting in suffocation if spilled in shallow, running water. Product may be moderately toxic to amphibians by preventing dermal respiration.

If applied to leaves, this product may kill grasses and small plants by interfering with transpiration and respiration.

This product may cause gastrointestinal distress in birds and mammals through ingestion.

12.2 Persistence and degradability

Is rapidly biodegradable. Biodegradation is possible with 100 to 120 days in aerobic environments at temperatures above 70 °F (21 °C).

12.3 Bioaccumulative potential

No Data Available.

12.4 Mobility in Soil

No Data Available.

12.5 Other Adverse Effects

No Data Available.

SECTION 13) DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste.

SECTION 14) TRANSPORT INFORMATION

ADR Information

- 14.1 UN number: Not Regulated
- 14.2 UN shipping name: N/A
- 14.3 Hazard class: N/A
- 14.4 Packaging group: N/A
- 14.5 Environmental hazards: No data available
- 14.6 Special precautions for users: No data available
- 14.7 Annex II of MARPOL 73/78 and the IBC code by bulk freight: No data available

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0064742-53-6	MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) LIGHT NAPHTHENIC	77% - 100%	DSL,SARA312,TSCA
0000128-39-2	2,6-DI-T-BUTYLPHENOL	0.0% - 0.3%	DSL,SARA312,TSCA

SECTION 16) OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Full text of H-Statements referred to under Section 3

- H302 Harmful if swallowed
- H304 May be fatal if swallowed and enters airways
- H312 Harmful in contact with skin
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H350 May cause cancer.
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

DISCLAIMER

This SDS is prepared to comply with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) as prescribed by the United States (US) Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).

Information provided in this Safety Data Sheet is considered accurate and reliable based on information issued from internal and outside sources to the best of D-A Lubricant Company, Inc.'s Manufacturer's knowledge; however, D-A Lubricant Company, Inc. makes no representations, guarantees or warranties, expressed or implied, of merchantability or fitness for the particular purpose, regarding the accuracy of such information or the result to be obtained from the use thereof or as to the sufficiency of information herein presented. D-A Lubricant Company, Inc. assumes no responsibility for injury to recipient or to third persons or for any damage to any property and recipient assumes all such risks.

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, D-A Lubricant Company, Inc., must rely upon information provided by the material manufacturer.