



# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Trade name or designation of the mixture	Red Line® D4 ATF Automatic/Manual Transmission Fluid/Transaxle Fluid
Registration number	-
Synonyms	None.
SDS number	829142
Issue date	11-September-2015
Version number	01
Revision date	-
Supersedes date	-

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Transmission fluid.
Uses advised against	All other uses.

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer / Supplier

Company name	RED LINE SYNTHETIC OIL CORP.
Address	6100 Egret Court, Benicia, CA 94510, USA
SDS Information	
Telephone number	+1-707-745-6100
Technical Information	
Telephone number	+1-707-745-6100

### 1.4. Emergency telephone number

CHEMTREC UK	+ (44)-870-8200418
CHEMTREC Germany (toll free)	0800-181-7059
CHEMTREC France	+ (33)-975181407
CHEMTREC Spain (toll free)	900-868538
CHEMTREC Italy (toll free)	800-789-767
CHEMTREC Italy	+ (39)-0245557031
CHEMTREC Czech Republic	+ (420)-228880039
CHEMTREC Belgium	+ (32)-28083237

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.
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**Hazard summary** Dangerous for the environment if discharged into watercourses.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms	None.
Signal word	None.
Hazard statements	
H412	Harmful to aquatic life with long lasting effects.

## Precautionary statements

### Prevention

P273 Avoid release to the environment.

### Response

Wash hands after handling.

### Storage

Store away from incompatible materials.

### Disposal

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

**Supplemental label information** EUH208 - Contains 2-Propanol, 1-(tert-dodecylthio). May produce an allergic reaction.

**2.3. Other hazards** Not a PBT or vPvB substance or mixture. Prolonged and repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
1-Dodecene trimer, hydrogenated	75-85	151006-62-1 417-070-7	-	601-064-00-8	
<b>Classification:</b>	Aquatic Chronic 4;H413				
Bis(nonylphenyl)amine	1-5	36878-20-3 253-249-4	-	-	
<b>Classification:</b>	Aquatic Chronic 4;H413				
Thiophene, tetrahydro-, 1,1-dioxide, 3-(c9-11-isoalkyloxy) derivs., C10-rich	1-2	398141-87-2 -	-	-	
<b>Classification:</b>	Aquatic Chronic 2;H411				
2-Propanol, 1-(tert-dodecylthio)-	0.1-<1	67124-09-8 266-582-5	-	-	
<b>Classification:</b>	Skin Sens. 1;H317, Aquatic Acute 1;H400, Aquatic Chronic 1;H410				
Non-Hazardous Materials	Balance	Various -	-	-	
<b>Classification:</b>	-				

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 4.1. Description of first aid measures

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms persist.

**Skin contact** Remove contaminated clothing and wash skin with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Flush eyes with water as a precaution. Get medical attention if irritation develops or persists.

**Ingestion** Rinse mouth. Get medical attention if any discomfort continues.

**4.2. Most important symptoms and effects, both acute and delayed** Prolonged or repeated contact may dry skin and cause irritation. Irritation of eyes and mucous membranes. Inhalation of oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing.

**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

## SECTION 5: Firefighting measures

**General fire hazards** The product is not flammable. Will burn if involved in a fire.

### 5.1. Extinguishing media

**Suitable extinguishing media** Dry chemical, CO<sub>2</sub>, water spray or regular foam.

<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>5.2. Special hazards arising from the substance or mixture</b>	Combustion products include: Carbon monoxide, carbon dioxide, various hydrocarbon fragments as well as thick smoke. Oxides of Sulfur, Phosphorus and Nitrogen may also be formed.
<b>5.3. Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Special fire fighting procedures</b>	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

<b>6.1. Personal precautions, protective equipment and emergency procedures</b>	
<b>For non-emergency personnel</b>	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Provide adequate ventilation. Keep unnecessary personnel away.
<b>For emergency responders</b>	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
<b>6.2. Environmental precautions</b>	Prevent spillage entering a watercourse or sewer, contaminating soil or vegetation. If this is not possible notify police and appropriate authorities immediately.
<b>6.3. Methods and material for containment and cleaning up</b>	Liquid spilled on the ground:  Contain the liquid if possible. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.  Liquid spread on water surface:  Confine the spill with booms. Remove from water surface by skimming or with suitable absorbents. Transfer to a container for disposal.  Clean up in accordance with all applicable regulations. Local authorities should be advised if significant spillages cannot be contained.
<b>6.4. Reference to other sections</b>	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

<b>7.1. Precautions for safe handling</b>	Wear necessary protective equipment. Avoid inhalation of vapours and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces. Observe good industrial hygiene practices. Wash thoroughly after handling.
<b>7.2. Conditions for safe storage, including any incompatibilities</b>	Keep container tightly closed in a dry and well-ventilated place. Protect against physical damage. Store away from incompatible materials.
<b>7.3. Specific end use(s)</b>	Transmission fluid.

## SECTION 8: Exposure controls/personal protection

<b>8.1. Control parameters</b>	
<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Recommended monitoring procedures</b>	Follow standard monitoring procedures.
<b>Derived no-effect level (DNEL)</b>	Not available.
<b>Predicted no effect concentrations (PNECs)</b>	Not available.
<b>8.2. Exposure controls</b>	
<b>Appropriate engineering controls</b>	Provide adequate ventilation and minimise the risk of inhalation of vapours and mists.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>General information</b>	Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
<b>Eye/face protection</b>	It is a good industrial hygiene practice to minimise eye contact. Wear approved safety glasses or goggles.
<b>Skin protection</b>	

<b>- Hand protection</b>	Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
<b>- Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	No protection is ordinarily required with adequate ventilation. In case of inadequate ventilation or risk of inhalation of oil mist, suitable respiratory equipment with combination filter (type A2/P2) can be used.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>Hygiene measures</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.
<b>Environmental exposure controls</b>	Contain spills and prevent releases and observe national regulations on emissions.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Colour</b>	Red.
<b>Odour</b>	Slight hydrocarbon.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	148.0 °C (298.4 °F) Pensky-Martens Closed Cup ASTM D93, EPA 1010
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.

#### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	< 1 mm Hg
<b>Vapour density</b>	> 1 (Air= 1)
<b>Relative density</b>	0.843
<b>Relative density temperature</b>	15.56 °C (60 °F)
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient (n-octanol/water)</b>	
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	7.1 cSt (100 °C) 35.1 cSt (40 °C)
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidising.

### 9.2. Other information

<b>Bulk density</b>	7 lbs/gal
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## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	The product is stable under normal conditions of use, storage and transport.
<b>10.3. Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.
<b>10.4. Conditions to avoid</b>	High temperatures. Ignition sources.
<b>10.5. Incompatible materials</b>	Strong oxidising agents. Strong reducing agents.

**10.6. Hazardous decomposition products**

None expected under normal conditions of use.

**SECTION 11: Toxicological information**

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

**Information on likely routes of exposure**

- Inhalation** No inhalation hazard under normal conditions.
- Skin contact** May cause mild skin irritation. Repeated exposure may cause skin dryness or cracking.
- Eye contact** May cause eye irritation on direct contact.
- Ingestion** May cause discomfort if swallowed.

**Symptoms** Prolonged or repeated contact may dry skin and cause irritation. Irritation of eyes and mucous membranes. Inhalation of oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing.

**11.1. Information on toxicological effects**

**Acute toxicity** Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Product	Species	Test results
Red Line® D4 ATF Automatic/Manual Transmision Fluid/Transaxle Fluid (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50		> 2 g/kg, (Estimated)
<i>Inhalation</i>		
LC50		> 5 mg/l, (Mist, estimated)
<i>Oral</i>		
LD50		> 5 g/kg, (Estimated)

**Skin corrosion/irritation** May cause mild skin irritation. Repeated exposure may cause skin dryness or cracking.

**Serious eye damage/eye irritation** May cause eye irritation on direct contact.

**Respiratory sensitisation** No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for classification).

**Skin sensitisation** The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals in contact with skin.

**Germ cell mutagenicity** No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for classification).

**Carcinogenicity** No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for classification).

**Reproductive toxicity** No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for classification).

**Specific target organ toxicity - single exposure** No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for classification).

**Specific target organ toxicity - repeated exposure** No information available on the mixture. However, none of the components are classified in respect of this hazard (or are present at a level below the concentration threshold for classification).

**Aspiration hazard** Not classified.

**Mixture versus substance information** None known.

**Other information** None known.

**SECTION 12: Ecological information**

**12.1. Toxicity** Harmful to aquatic life with long lasting effects.

**12.2. Persistence and degradability** The product is not readily biodegradable. Expected to be inherently biodegradable.

**12.3. Bioaccumulative potential** The product is not expected to bioaccumulate.

**Partition coefficient n-octanol/water (log Kow)**

<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	Expected to have low mobility in soil and sediments with adsorption being the predominant physical process.
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.
<b>12.6. Other adverse effects</b>	None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Recover and recycle, if practical. Contact specialist disposal companies.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied.
<b>EU waste code</b>	13 02 06* Waste codes should be assigned by the user based on the application for which the product was used.
<b>Disposal methods/information</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

Not regulated as dangerous goods.

### RID

Not regulated as dangerous goods.

### ADN

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended**

Not listed.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended**

Not listed.

#### **Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances**

Not listed.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Not listed.

**Directive 94/33/EC on the protection of young people at work**

Not listed.

#### **Other regulations**

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended. The product is classified and labelled in accordance with EC directives or respective national laws.

#### **National regulations**

Follow national regulation for work with chemical agents.

#### **15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

### **SECTION 16: Other information**

#### **List of abbreviations**

LC50: Lethal Concentration, 50%.

LD50: Lethal Dose, 50%.

#### **References**

ECHA CHEM

#### **Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

#### **Full text of any H-statements not written out in full under Sections 2 to 15**

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

#### **Training information**

Follow training instructions when handling this material.

#### **Further information**

No information available.

#### **Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available.