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® Full Synthetic 20W60 Motorcycle Oil
Registration number	-
Synonyms	None.
SDS number	830005
Issue date	21-November-2016
Version number	01
Revision date	-
Supersedes date	-

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

Identified uses	Engine oil.
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 & 1 703-527-3887

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

Health hazards		
Skin sensitisation	Category 1A	H317 - May cause an allergic skin reaction.
Environmental hazards		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.

Hazard summary May cause an allergic skin reaction. Dangerous for the environment if discharged into watercourses.

2.2. Label elements

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

Contains: Butanedioic acid, 2-[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-,1,4-bis(2-ethylhexyl) ester

Hazard pictograms

Signal word Warning

Hazard statements

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Storage Store away from incompatible materials.

Disposal

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

Supplemental label information None.

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
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	1 - < 3	68649-42-3 272-028-3	-	-	
Classification: Skin Irrit. 2;H315, Eye Dam. 1;H318, Aquatic Chronic 2;H411					
Butanedioic acid, 2-[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-,1,4-bis(2-ethylhexyl) ester	< 1	126104-53-8 -	-	-	
Classification: Skin Sens. 1A;H317, Aquatic Acute 1;H400, Aquatic Chronic 1;H410					

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. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

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 May cause an allergic skin reaction. Dermatitis. Rash. 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, CO2, water spray or regular foam.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture 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.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Provide adequate ventilation. Keep unnecessary personnel away.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Prevent spillage entering a watercourse or sewer, contaminating soil or vegetation. If this is not possible notify police and appropriate authorities immediately.
6.3. Methods and material for containment and cleaning up	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.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Wear necessary protective equipment. Avoid inhalation of vapours and contact with skin and eyes. Persons susceptible for allergic reactions should not handle this product. In case of spills, beware of slippery floors and surfaces. Observe good industrial hygiene practices. Wash thoroughly after handling.
7.2. Conditions for safe storage, including any incompatibilities	"Empty" containers retain product residue (liquid or vapour) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death. Keep container tightly closed in a dry and well-ventilated place. Protect against physical damage. Store away from incompatible materials.
7.3. Specific end use(s)	Engine oil.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Follow standard monitoring procedures.
Derived no effect levels (DNELs)	Not available.
Predicted no effect concentrations (PNECs)	Not available.

8.2. Exposure controls

Appropriate engineering controls	Provide adequate ventilation and minimise the risk of inhalation of vapours and mists.

Individual protection measures, such as personal protective equipment

General information	Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	It is a good industrial hygiene practice to minimise eye contact. Wear approved safety glasses or goggles.
Skin protection	
- Hand protection	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.
- Other	Wear suitable protective clothing.

Respiratory protection	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.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	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.
Environmental exposure controls	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	
Physical state	Liquid.
Form	Liquid.
Colour	Amber.
Odour	Petroleum.
Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 150.0 °C (> 302.0 °F) Pensky-Martens Closed Cup ASTM D93, EPA 1010
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	< 1 mm Hg
Vapour density	> 1 (Air = 1)
Relative density	0.898
Relative density temperature	15.56 °C (60 °F)
Solubility(ies)	Negligible in water.
Partition coefficient (n-octanol/water)	
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	23.7 cSt (100 °C) 161.6 cSt (40 °C)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

Bulk density	7.5 lbs/gal

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	The product is stable under normal conditions of use, storage and transport.
10.3. Possibility of hazardous reactions	Hazardous polymerisation does not occur.
10.4. Conditions to avoid	High temperatures. Ignition sources.
10.5. Incompatible materials	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	Inhalation of oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing.
Skin contact	Causes mild skin irritation. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
Eye contact	Mild eye irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms	May cause an allergic skin reaction. Dermatitis. Rash. 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® Full Synthetic 20W60 Motorcycle Oil (CAS Mixture)		
Acute		
Dermal		
LD50		> 2 g/kg, (Estimated)
Inhalation		
LC50		> 5 mg/l, (Estimated)
Oral		
LD50		> 5 g/kg, (Estimated)

Components	Species	Test results
Butanedioic acid, 2-[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-,1,4-bis(2-ethylhexyl) ester (CAS 126104-53-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000

Skin corrosion/irritation	Causes mild skin irritation. Repeated exposure may cause skin dryness or cracking.
Serious eye damage/eye irritation	Mild eye irritation.
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	May cause an allergic skin reaction.
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.

Components	Species	Test results
Butanedioic acid, 2-[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-,1,4-bis(2-ethylhexyl) ester (CAS 126104-53-8)		
Aquatic		
Acute		
Crustacea	EC50	Daphnia	0.52 mg/l, 48 h
	NOEC	Daphnia	0.32 mg/l, 48 h
Fish	LC50	Fish	0.64 mg/l, 96 h
	NOEC	Fish	0.047 mg/l, 96 h

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

12.3. Bioaccumulative potential Has the potential to bioaccumulate.

Partition coefficient n-octanol/water (log Kow)

Butanedioic acid, 2-[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)thio]-,1,4-bis(2-ethylhexyl) ester (CAS 126104-53-8)	> 4.59

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Expected to have low mobility in soil and sediments with adsorption being the predominant physical process.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Recover and recycle, if practical. Contact specialist disposal companies.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

EU waste code 13 02 06*
Waste codes should be assigned by the user based on the application for which the product was used.

Disposal methods/information Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of Marpol 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 (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 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 authorisation, 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.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended and respective national laws implementing EC directives. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended.
National regulations	Follow national regulation for work with chemical agents. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended.
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%. EC50: Effective Concentration, 50%. NOEC: No observed effect concentration.
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	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. 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.
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.