

# Safety Data Sheet

Safety Data Sheet according to Regulation (EC) No.  
1907/2006 (REACH)



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

### 1.1. Product identifier

Substance name:

**Red Line® SuperCool® Antifreeze/Coolant**

Other means of identification:

Red Line® SuperCool® Performance Antifreeze/Coolant  
Red Line® SuperCool® Boilguard Antifreeze/Coolant  
Red Line® SuperCool® Concentrate Antifreeze/Coolant

Code:

**831895**

Unique Formula Identifier (UFI):

**HWKX-M390-P30T-MKS4**

REACH Registration Number:

Not applicable

Issue date:

24-Aug-2020

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

Relevant identified uses:

Antifreeze

Uses advised against:

Other uses are not recommended unless an assessment demonstrates potential exposures will be controlled.

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

Manufacturer/Supplier:

RED LINE SYNTHETIC OIL  
6100 Egret Court  
Benicia, CA 94510

Technical Information:

SDS Information:

1-707-745-6100  
URL: [www.Phillips66.com/SDS](http://www.Phillips66.com/SDS)  
Phone: 800-762-0942  
Email: [SDS@P66.com](mailto:SDS@P66.com)

### 1.4. Emergency telephone number

CHEMTREC Global +1 703 527 3887  
CHEMTREC Germany 0800-181-7059  
CHEMTREC France +(33)-975181407  
CHEMTREC Spain 900-868538  
CHEMTREC UK +(44)-870-8200418  
CHEMTREC Sweden (Stockholm) +(46)-852503403

## SECTION 2: Hazard identification

### 2.1. Classification of the substance or mixture

**CLP Classification (EC No 1272/2008)**

H302 -- Acute Toxicity, Oral -- Category 4

H361d -- Reproductive toxicity -- Category 2

H373 -- Specific target organ toxicity (repeated exposure) -- Category 2

### 2.2. Label elements



**WARNING**

**H302 - Harmful if swallowed**

**H361d - Suspected of damaging the unborn child**

**H373 - May cause damage to organs through prolonged or repeated exposure**

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P264 - Wash skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

**2.3. Other hazards**

None known

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

Chemical Name	CASRN	EINECS	REACH Registration No	Concentration <sup>1</sup>	Classification <sup>2</sup>
Ethylene glycol	107-21-1	203-473-3	01-2119456816-28-0093	45-95	H302, H373
Water	7732-18-5	231-791-2	--	0-55	-
Diethylene glycol	111-46-6	203-872-2	--	0-5	H302, H373
Hexanoic acid, 2-ethyl-, sodium salt	19766-89-3	243-283-8	--	0-5	H315, H319, H361d

<sup>1</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

<sup>2</sup> Regulation EC 1272/2008.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**Eye Contact:** If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

**Skin Contact:** Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention.

**Inhalation:** First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. Seek immediate medical attention.

**Ingestion:** If swallowed, seek emergency medical attention. If victim is drowsy or unconscious and vomiting, place on the left side with the head down and do not give anything by mouth. If victim is conscious and alert and ingestion occurred within the last hour, vomiting should be induced for ingestions of several swallows (2 ounces in an adult) preferably under direction from a physician or poison center. Do not leave victim unattended and observe closely for adequacy of breathing.

**4.2. Most important symptoms and effects, both acute and delayed**

Effects of overexposure may include irritation of the digestive tract, irritation of the respiratory tract, abdominal pain, nausea, vomiting, coughing, pulmonary edema (accumulation of fluids in the lungs), irregular heartbeats (arrhythmias), visual disturbances, signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue), convulsions, coma.

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

**Notes to Physician:** Toxic metabolites of ethylene glycol may cause acidosis, coma, convulsions, renal failure, or circulatory collapse. The monitoring of urine output, serum creatinine, electrolytes, acid base balance, urine hemoglobin and serum calcium is recommended following significant exposures. Ethanol blocks the formation of glycolic acid and therefore is the

antidote of choice. Because of the rapid conversion (3-hour elimination half-life) of the ethylene glycol, ethanol should be administered as soon as possible in cases of severe poisoning.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F / 100°C. 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.

### 5.2. Special hazards arising from the substance or mixture

**Unusual Fire & Explosion Hazards:** This material may burn, but will not ignite readily. If container is not properly cooled, it can rupture in the heat of a fire.

**Hazardous Combustion Products:** Combustion may yield carbon monoxide and aldehydes.

### 5.3. Special protective actions for fire-fighters

For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapours and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorised personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

### 6.2. Environmental precautions

Stop and contain spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorised drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard.

### 6.3. Methods and material for containment and cleaning up

Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. See Section 13 for information on appropriate disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Keep away from flames and hot surfaces. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapour or mist. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Do not enter confined spaces such as tanks or pits without following proper entry procedures. Do not wear contaminated clothing or shoes.

## 7.2. Conditions for safe storage, including any incompatibilities

Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to appropriate guidance pertaining to cleaning, repairing, welding, or other contemplated operations.

## 7.3. Specific end use(s)

Refer to supplemental exposure scenarios if attached.

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

### Occupational Exposure Limits:

Chemical Name	ACGIH	Ireland	United Kingdom	Phillips 66
Ethylene glycol	TWA-8hr: 25 ppm vapor fraction STEL: 50 ppm vapor fraction STEL: 10 mg/m <sup>3</sup> inhalable particulate matter, aerosol only	TWA-8hr: 10 mg/m <sup>3</sup> particulate TWA-8hr: 20 ppm vapour TWA-8hr: 52 mg/m <sup>3</sup> vapour STEL: 40 ppm vapour STEL: 30 mg/m <sup>3</sup> particulate STEL: 104 mg/m <sup>3</sup> vapour Skin	TWA-8hr: 10 mg/m <sup>3</sup> particulates TWA-8hr: 20 ppm vapour TWA-8hr: 52 mg/m <sup>3</sup> vapour STEL: 40 ppm vapour STEL: 104 mg/m <sup>3</sup> vapour Skin	---
Diethylene glycol	---	TWA-8hr: 23 ppm TWA-8hr: 100 mg/m <sup>3</sup> STEL: 69 ppm STEL: 300 mg/m <sup>3</sup>	TWA-8hr: 23 ppm TWA-8hr: 101 mg/m <sup>3</sup>	---

STEL = Short Term Exposure Limit (15 minutes); TWA = Time Weighted Average (8 hours); --- = No Occupational Exposure Limit. Local regulations may be more stringent than regional or national requirements.

**Biological Limit Values:** None  
None = No Biological Limit Value

**Relevant DNEL and PNEC:** No information available

**Environmental Predicted No-Effect Concentration (PNEC):** No information available

## 8.2. Exposure controls

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

**Eye/Face Protection:** The use of eye protection that meets or exceeds EN 166 is recommended to protect against potential eye contact, irritation, or injury. Depending on conditions of use, close fitting eye protection and a face shield may be necessary.

**Skin/Hand Protection:** The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Suggested protective materials: Neoprene™, Viton™, Polyvinyl chloride (PVC).

**Respiratory Protection:** Where there is potential for airborne exposure above the exposure limit an approved air purifying respirator equipped with Type A, organic gases and vapours filter (as specified by the manufacturer) in combination with Type P2 - Medium efficiency particle filters may be used.

A respiratory protection programme that follows recommendations for the selection, use, care and maintenance of respiratory protective devices in EN 529:2005 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health.

**Environmental Exposure Controls:** Refer to Sections 6, 7, 12 and 13.

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

## SECTION 9: Physical and chemical properties

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

Data represent typical values and are not intended to be specifications. N/A = Not Applicable; N/D = Not Determined

<b>Appearance:</b>	yellow, Transparent
<b>Physical form of product:</b>	Liquid
<b>Odour:</b>	Mild glycol
<b>Odour threshold:</b>	N/D
<b>pH:</b>	N/A
<b>Melting / freezing point:</b>	-29.2 °F / -34 °C
<b>Initial boiling point and boiling range:</b>	226.4 - 339.8 °F / 108 - 171 °C
<b>Flash point:</b>	> 216 °F / > 102 °C
<b>Method:</b>	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
<b>Evaporation Rate (nBuAc=1):</b>	N/D
<b>Flammability (solid, gas):</b>	N/A
<b>Upper Explosive Limits (vol % in air):</b>	N/D
<b>Lower Explosive Limits (vol % in air):</b>	N/D
<b>Vapour pressure:</b>	N/D
<b>Vapour density:</b>	>1 (air = 1)
<b>Relative density:</b>	1.08-1.12 (water = 1)
<b>Solubility(ies):</b>	Miscible
<b>Partition coefficient n-octanol /water (log KOW):</b>	N/D
<b>Autoignition temperature:</b>	N/D
<b>Decomposition temperature:</b>	N/D
<b>Viscosity:</b>	2.2-10 cSt @ 40°C
<b>Explosive properties:</b>	N/D
<b>Oxidising properties:</b>	N/D

### 9.2. Other information

<b>Other information</b>	
<b>Pour point:</b>	No data
<b>Bulk Density:</b>	9.0-9.3 lbs/gal

## SECTION 10: Stability and reactivity

**10.1. Reactivity** Not chemically reactive.

**10.2. Chemical stability** Stable under normal ambient and anticipated conditions of use.

10.3. Possibility of hazardous reactions	Hazardous reactions not anticipated.
10.4. Conditions to avoid	Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition.
10.5. Incompatible materials	Avoid contact with strong oxidizing agents and strong reducing agents.
10.6. Hazardous decomposition products	Not anticipated under normal conditions of use.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Substance / Mixture

Acute Toxicity	Hazard	Additional Information	LC50/LD50 Data
Inhalation	Unlikely to be harmful		>5 mg/L (mist, estimated)
Dermal	Unlikely to be harmful		> 2 g/kg (estimated)
Oral	Harmful if swallowed		1.4 g/kg (estimated)

**Likely Routes of Exposure:** Inhalation, eye contact, skin contact

**Aspiration Hazard:** Not an aspiration hazard.

**Skin Corrosion/Irritation:** Causes mild skin irritation.

**Serious Eye Damage/Irritation:** Causes mild eye irritation.

**Skin Sensitisation:** No information available on the mixture, however none of the components have been classified for skin sensitisation (or are below the concentration threshold for classification).

**Respiratory Sensitisation:** No information available.

**Specific Target Organ Toxicity (Single Exposure):** No information available on the mixture, however none of the components have been classified for target organ toxicity (or are below the concentration threshold for classification).

**Specific Target Organ Toxicity (Repeated Exposure):** May cause damage to organs through prolonged or repeated exposure. Based on component information.

**Carcinogenicity:** No information available on the mixture, however none of the components have been classified for carcinogenicity (or are below the concentration threshold for classification).

**Germ Cell Mutagenicity:** No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

**Reproductive Toxicity:** Suspected of damaging the unborn child. Based on component information.

### Information on Toxicological Effects of Components

#### Ethylene glycol

Target Organ(s): Ingestion of ethylene glycol by humans results in kidney damage (renal epithelial damage and oxalate crystals in the tubules). Administration of ethylene glycol resulted in hepatocellular hyaline degeneration in male mice fed diets containing 12,500 or 25,000 ppm ethylene glycol and female mice fed diets containing 50,000 ppm ethylene glycol.

Reproductive Toxicity: Ethylene glycol can cause adverse developmental effects such as skeletal and soft tissue malformations in rodents when administered during gestation at high doses. However, given the absence of reported developmental effects in humans, the relevance of defects in rodents remains largely unknown. It was concluded by the National Toxicology Programme Center for the Evaluation of Risks to Human Reproduction that there is negligible concern for reproductive or developmental toxicity in humans at typical exposure levels.

#### Diethylene glycol

Target Organ(s): Accidental human ingestion of diethylene glycol resulted in kidney damage (severe renal epithelial damage, tubular necrosis, and anuria). Liver damage (vacuolation and hyaline degeneration) was also seen in rats fed diets containing 1 to 4% diethylene glycol for 2 years.

**Hexanoic acid, 2-ethyl-, sodium salt**

Reproductive Toxicity: 2-Ethylhexanoic acid administered to the parental generation of rats via drinking water resulted in delayed fertility at 500 mg/kg and slight developmental toxicity at 250 mg/kg. The No Observed Adverse Effects Levels (NOAELs) were considered to be 250 mg/kg (parental) and 100 mg/kg (developmental).

## SECTION 12: Ecological information

### 12.1. Toxicity

Not expected to be harmful to aquatic life

### 12.2. Persistence and degradability

Not expected to persist in the environment if spilled or released.

### 12.3. Bioaccumulative potential

Not expected to bioaccumulate.

### 12.4. Mobility in soil

Due to its high water solubility, it will not adsorb to particulate matter or surfaces and is expected to have high mobility in soil and sediments.

### 12.5. Results of PBT and vPvB assessment

Not a PBT or vPvB substance.

### 12.6. Other adverse effects

None anticipated.

**German Water Hazard Information:** hazard class 1 - low hazard to waters

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**European Waste Code:** 16 03 04 inorganic wastes other than those mentioned in 16 03 03

This material, if discarded as produced, would be considered as hazardous waste pursuant to Directive 2008/98/EC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies. This code has been assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste generators/producers are responsible for assessing the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code.

Disposal must be in accordance with Directive 2008/98/EC and other applicable national or regional provisions, and based upon material characteristics at time of disposal. For incineration of waste, follow Directive 2000/76/EC. For landfill of waste, follow Directive 1999/31/EC.

**Empty Containers:** Container contents should be completely used and containers emptied prior to discard. Empty drums should be properly sealed and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with applicable regulations.

## SECTION 14: Transport information

### 14.1. UN number

UN3082

### 14.2. UN proper shipping name

RQ, Environmentally hazardous substances, liquid, n.o.s. ( Ethylene glycol )

### 14.3. Transport hazard class(es)



#### 14.4. Packing group

III

#### 14.5. Environmental hazards

This product does not meet the DOT/UN/IMDG/IMO criteria of a marine pollutant

#### 14.6. Special precautions for user

Only regulated when the amount of ethylene glycol (pure EG not total solution) in a single container is greater than 5,000 lbs. Otherwise, this material is NOT REGULATED BY DOT.

#### 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

EC 1272/2008 - Classification, labelling and packaging of substances and mixtures  
EN166:2002 Eye Protection  
EN 529:2005 Respiratory Protective devices  
BS EN 374-1:2003 Protective gloves against chemicals and micro-organisms  
Occupational Exposure Limits, Technical Rules for Dangerous Substances  
Occupational Exposure Limits, Health and Safety Authority  
Workplace Exposure Limits, EH40/2005, Control of Substances Hazardous to Health  
Federal Water Act on the Classification of Substances Hazardous to Waters  
Directive 2008/98/EC (Waste Framework Directive)

**Export Rating:** NLR (No Licence Required)

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for the substance/mixture.

### SECTION 16: Other information

<b>Issue date</b>	24-Aug-2020
<b>Status:</b>	<b>FINAL</b>
<b>Previous Issue Date:</b>	09-Jul-2020
<b>Revised Sections or Basis for Revision:</b>	Product Name / Synonyms (Section 1) Composition (Section 3)
<b>Safety Data Sheet Number:</b>	<b>831895</b>
<b>Language:</b>	BE

#### List of Relevant Hazard Statements:

H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H361d - Suspected of damaging the unborn child  
H373 - May cause damage to organs through prolonged or repeated exposure

#### Regulatory Basis of Classification

CLP Classification (EC No 1272/2008)	Regulatory Basis
H302 -- Acute Toxicity, Oral -- Category 4	Based on component information.
H361d -- Reproductive toxicity -- Category 2	Based on component information.
H373 -- Specific target organ toxicity (repeated exposure) -- Category 2	Based on component information.

#### Guide to Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists; ADR = Agreement on Dangerous Goods by Road; BMGV = Biological Monitoring Guidance Value; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit; EINECS = European Inventory of Existing Commercial Chemical Substances; EPA = [US] Environmental Protection Agency; Germany-TRGS = Technical Rules for Dangerous Substances; IARC = International Agency for Research on Cancer; ICAO/IATA = International Civil Aviation Organisation / International Air Transport Association; INSHT = National Institute for Health and Safety at Work; IMDG = International Maritime Dangerous Goods; Ireland-HSA = Ireland's National Health and Safety Authority; LEL = Lower Explosive Limit; MARPOL = Marine Pollution; N/A = Not Applicable; N/D = Not Determined; NTP = [US] National Toxicology Programme; PBT = Persistent, Bioaccumulative and Toxic; RID = Regulations Concerning the International Transport of Dangerous Goods by Rail; STEL = Short Term Exposure Limit; TLV = Threshold Limit Value; TRGS 903 = Technical



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rules for hazardous substances; TWA = Time Weighted Average; UEL = Upper Explosive Limit; UK-EH40 = United Kingdom EH40/2005 OEL;  
vPvB = very Persistent, very Bioaccumulative

**Disclaimer of Expressed and implied Warranties:**

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