



# 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	Comma Power Steering Fluid
Registration number	-
Synonyms	None.
Product code	PSF*L
Issue date	12-October-2018
Version number	05
Revision date	12-October-2018

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

Identified uses	Hydraulic oil
Uses advised against	None known.

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

	Manufactured by Moove Lubricants
Address	Dering Way, Gravesend, Kent DA12 2QX
Telephone	+44 (0) 1474 564 311
Address	Operations Plant Dering Way, Gravesend, Kent DA12 2QX
Telephone	+44 (0) 1474 564 311
Email	technical@uk.moovelub.com

### 1.4. Emergency telephone

Asia Pacific	+ (1) 760 476 3960
China	+ (86) 4001 2001 74
Europe	+ (44) 8 08 189 0979
Middle East/Africa	+ (1) 760 476 3959

Access code 334498

## 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

<b>Environmental hazards</b>		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.

**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

<b>Prevention</b>	
P273	Avoid release to the environment.
<b>Response</b>	
	Wash hands after handling.
<b>Storage</b>	
	Store away from incompatible materials.
<b>Disposal</b>	
P501	Dispose of waste and residues in accordance with local authority requirements.

**Supplemental label information** None.

### 2.3. Other hazards

Not a PBT or vPvB substance or mixture.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Reaction product of alkylthioalcohol and substituted phosphorus compound	< 0.2	N/A -	-	-	
<b>Classification:</b>	Acute Tox. 4;H312, Skin Corr. 1B;H314, Eye Dam. 1;H318, Aquatic Acute 1;H400, Aquatic Chronic 1;H410				
Other components below reportable levels	90 - 100				

#### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments** 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** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed** Exposure may cause temporary irritation, redness, or discomfort.

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

## SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may 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** Move containers from fire area if you can do so without risk.

**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** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**6.2. Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

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

Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

### 6.4. Reference to other sections

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

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

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

### 7.3. Specific end use(s)

Hydraulic 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

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

#### Individual protection measures, such as personal protective equipment

##### General information

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

##### Eye/face protection

Wear safety glasses with side shields (or goggles).

##### Skin protection

###### - Hand protection

Wear appropriate chemical resistant gloves.

###### - Other

Wear suitable protective clothing.

##### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

##### 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.

#### Environmental exposure controls

Inform appropriate managerial or supervisory personnel of all environmental releases.

## SECTION 9: Physical and chemical properties

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

#### Appearance

##### Physical state

Liquid.

##### Form

Liquid.

##### Colour

Red.

#### Odour

Characteristic.

#### Odour threshold

Not available.

#### pH

Not available.

#### Melting point/freezing point

Not available.

<b>Initial boiling point and boiling range</b>	360 °C (680 °F) estimated
<b>Flash point</b>	> 200.0 °C (> 392.0 °F)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	0.1 hPa estimated
<b>Vapour density</b>	Not available.
<b>Relative density</b>	0.86
<b>Relative density temperature</b>	20 °C (68 °F)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	260 °C (500 °F) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.
<b>9.2. Other information</b>	
<b>Kinematic viscosity</b>	35 mm <sup>2</sup> /s (40 °C (104 °F))

## 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>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong oxidising agents.
<b>10.6. Hazardous decomposition products</b>	No hazardous decomposition products are known.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
<b>Symptoms</b>	Exposure may cause temporary irritation, redness, or discomfort.
<b>11.1. Information on toxicological effects</b>	
<b>Acute toxicity</b>	No data available.
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Respiratory sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Skin sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Carcinogenicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.

<b>Specific target organ toxicity - single exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.
<b>Mixture versus substance information</b>	No information available.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

<b>12.1. Toxicity</b>	Harmful to aquatic life with long lasting effects. Based on available data, the classification criteria are not met for hazardous to the aquatic environment, acute hazard.
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.
<b>12.3. Bioaccumulative potential</b>	No data available.
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	No data available.
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture. Not available.
<b>12.6. Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	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 73/78 and the IBC Code** Not established.

**General information** IMDG Regulated Marine Pollutant.

## 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 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.

#### **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. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

#### **National regulations**

Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC.

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

No Chemical Safety Assessment has been carried out.

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

#### **List of abbreviations**

Not available.

#### **References**

Not available.

#### **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**

H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

#### **Revision information**

Product and Company Identification: Alternate Trade Names

#### **Training information**

Follow training instructions when handling this material.

#### **Disclaimer**

Moove Lubricants Ltd. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.