



SAFETY DATA SHEET

SDS: 5182

5182 PYROSHIELD® SYN OPEN GEAR GREASE

Issuing Date 04-24-2012

Revision Date 05-25-2017

Revision Number 5.4

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier**Product Name** 5182 PYROSHIELD® SYN OPEN GEAR GREASE**Other means of identification****Synonyms** No information available**Recommended use of the chemical and restrictions on use****Identified uses** Lubricant**Uses advised against** Consumer use**Details of the supplier of the safety data sheet****Manufacturer**Lubrication Engineers Inc.
1919 E. Tulsa
Wichita, KS 67216
USA
800-537-7683**Emergency Telephone Number**CHEMTREC: 1-800-424-9300 (NORTH AMERICA)
+1-703-527-3887 (INTERNATIONAL)

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2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

Emergency Overview

Signal Word

None

Hazard Statements

None

The product contains no substances which at their given concentration, are considered to be hazardous to health

appearance purple**Physical state** Paste**Odor** Hydrocarbon-like

Precautionary Statements - Prevention

None.

Response

None.

Eyes

None.

Skin

None.

Inhalation

None.

Ingestion

None.

Fire

None.

Spill

None.

Storage

None.

Disposal

None.

Hazards not otherwise classified (HNOC)

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

The producer of "5182" declares that it contains less than 3% DMSO extractable material by IP-346

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4. FIRST AID MEASURES

First Aid Measures

General Advice	If symptoms develop move victim to fresh air. Show this safety data sheet to the doctor in attendance. Do not breathe dust/fume/gas/mist/vapors/spray.***
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Call a physician if irritation persists.***
Skin Contact	Consult a physician if necessary. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.***
Inhalation	Move to fresh air. If symptoms persist, call a physician.***
Ingestion	Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.***
Protection of First-aiders	Use personal protective equipment.***

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point	*** 223 °C*** /*** 435 °F***
Suitable Extinguishing Media	Water spray, Carbon dioxide (CO2), Foam, Dry chemical
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating gases and vapors.
Explosion Data	
Sensitivity to Mechanical Impact	Not impact sensitive.
Sensitivity to Static Discharge	May be ignited by friction, heat, sparks or flames.
Protective Equipment and Precautions for Firefighters	Wear self-contained breathing apparatus and protective suit.

NFPA Health hazard 1 Flammability 1 Stability 1

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Do not touch or walk through spilled material. Remove all sources of ignition.

Environmental Precautions

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Environmental Precautions Prevent entry into waterways, sewers, basements or confined areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.***

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

Methods for Cleaning up Use personal protective equipment. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Prevent vapor buildup by providing adequate ventilation during and after use. Do not eat, drink or smoke when using this product.***

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.***

Incompatible products. Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
antimony dialkylthiocarbamate 15890-25-2	TWA: 0.5 mg/m ³ ***	TWA: 0.5 mg/m ³ (vacated) TWA: 0.5 mg/m ³ ***	IDLH: 50 mg/m ³ TWA: 0.5 mg/m ³ ***
Diacetone alcohol 123-42-2	TWA: 50 ppm***	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 240 mg/m ³ ***	IDLH: 1800 ppm TWA: 50 ppm TWA: 240 mg/m ³ ***
White Mineral Oil 8042-47-5	TWA: 5 mg/m ³ ***	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³ ***	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³ ***
Silica, quartz 14808-60-7	TWA: 0.025 mg/m ³ ***	TWA: 50 µg/m ³ (vacated) TWA: 0.1 mg/m ³ ***	IDLH: 50 mg/m ³ TWA: 0.05 mg/m ³ ***
Mica (mineral) 12001-26-2	TWA: 3 mg/m ³ ***	(vacated) TWA: 3 mg/m ³ ***	IDLH: 1500 mg/m ³ TWA: 3 mg/m ³ ***
Titanium Dioxide 13463-67-7	TWA: 10 mg/m ³ ***	TWA: 15 mg/m ³ (vacated) TWA: 10 mg/m ³ ***	IDLH: 5000 mg/m ³ ***
Calcium Carbonate 471-34-1	-	TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 15 mg/m ³ (vacated) TWA: 5 mg/m ³ ***	TWA: 10 mg/m ³ TWA: 5 mg/m ³ ***
Iron Oxide 1309-37-1	TWA: 5 mg/m ³ ***	TWA: 10 mg/m ³ TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 10 mg/m ³ (vacated) TWA: 5 mg/m ³ ***	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³ ***

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Appropriate engineering controls

Engineering Measures Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection **Tightly fitting safety goggles.*****

Skin and Body Protection Long sleeved clothing. Protective gloves.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state appearance	Paste purple
Odor	Hydrocarbon-like
Odor threshold	No information available
<u>Property</u>	<u>Property</u>
pH	6 - 8
Melting point/freezing point	No data available
Boiling Point/Range	no data available
Flash Point	*** 223 °C*** / 435 °F***
Vapor pressure	No data available
Vapor Density	< 1 (Air = 1)
Specific Gravity	0.91
Water solubility	negligible
Partition Coefficient: n-octanol/water	no data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity, kinematic	not applicable

10. STABILITY AND REACTIVITY

reactivity No information available

Chemical stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid Heat, flames and sparks. Contact with other chemicals

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)

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11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information
Inhalation	May cause irritation of respiratory tract.
Eye Contact	Contact with eyes may cause irritation.
Skin Contact	May cause irritation.
Ingestion	There is no data available for this product.

Component Information No information available

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

The producer of "5182" declares that it contains less than 3% DMSO extractable material by IP-346

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

Target Organ Effects Central Vascular System (CVS), Respiratory system, Eyes, Skin.***

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .***

ATEmix (oral)	103593*** mg/kg***
ATEmix (dermal)	7076*** mg/kg***
ATEmix (inhalation-dust/mist)	20579*** mg/l***

12. ECOLOGICAL INFORMATION

Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to DOT.***

Ecotoxicity None known

Persistence and Degradability No information available.

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Bioaccumulation No information available.

Mobility The product is insoluble and floats on water.

Chemical Name	Log Pow
Diacetone alcohol 123-42-2	1.03***
White Mineral Oil 8042-47-5	>6***
Naphtha (petroleum), heavy aromatic 64742-94-5	2.9 - 6.1***

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated Packaging Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

This product contains one or more substances that are listed with the State of California as a hazardous waste***

Chemical Name	California Hazardous Waste Status
Zinc pyrophosphate 7446-26-6	Toxic***
antimony dialkyldithiocarbamate 15890-25-2	Toxic***

14. TRANSPORT INFORMATION

DOT Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
NDSL	Complies
EINECS	Not determined
ELINCS	Not determined
ENCS	Not determined
IECSC	Complies
KECL	Not determined
PICCS	Complies

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AICS

Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Zinc pyrophosphate - 7446-26-6	7446-26-6	5	1.0***
antimony dialkyldithiocarbamate - 15890-25-2	15890-25-2	3.255	1.0***

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes***
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc pyrophosphate 7446-26-6		X***		
antimony dialkyldithiocarbamate 15890-25-2		X***		

CERCLA

This material does not contain any components with a CERCLA RQ.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

16. OTHER INFORMATION

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Reason for revision Update to Format.

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SDS is available at www.LElubricants.com**End of Safety Data Sheet**