

LUBRICATION ENGINEERS®, INC.
300 Bailey Avenue FORT WORTH, TX 76107
MATERIAL SAFETY DATA SHEET
SECTION I - PRODUCT IDENTIFICATION

SUPPLIER:
Lubrication Engineers®, Inc.
300 Bailey Avenue
Fort Worth, TX 76107

EMERGENCY TELEPHONE NUMBERS:
Company: (817) 834-6321
In the event of an emergency spill, fire, or exposure—Call:
Chemtrec: (Within USA) (800) 424-9300
(Outside USA—call collect) (703) 527-3887
TRADE NAME AND SYNONYMS:
5100 PYROSHIELD® Syn Open Gear Grease
(Aerosol)

CHEMICAL NAME AND SYNONYMS:
Not applicable

CHEMICAL FAMILY:
Hydrocarbon

FORMULA:
Not applicable

SECTION II - TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE: Dark purple lubricant
ODOR: Solvent oil odor
RELATIVE DENSITY: (Air=1) >1
MELTING POINT: °F Not applicable
BOILING POINT: °F Unknown
VAPOR PRESSURE: Unknown

VISCOSITY: @ 210°F, SUS Not applicable
@ 100°C, cSt Not applicable
VISCOSITY: @ 100°F, SUS Not applicable
@ 40°C, cSt Not applicable
SOLUBILITY IN WATER: Negligible
PH: 6-8
POUR POINT: °F Not applicable
FLASH POINT: °F (Method) 0 (TCC)
SPECIFIC GRAVITY: (H₂O=1) <1.0

FLAMMABILITY CATEGORY PER 16 CFR 1500.45:

Extremely flammable

SECTION III - INGREDIENTS

	WT PCT (APPROX)	TLV	ORAL LD50	DERMAL LD50
HAZARDOUS INGREDIENTS:				
Carbon dioxide	<3.0	800 ppm	Unknown	Unknown
Heptane	<54.0	50 ppm	Unknown	Unknown
Antimony compounds (non-toxic, liquid organo-metallic compound)	3.0-7.0	0.5 mg/m ³ as Sb	>16400 mg/kg Rat	>16000 mg/kg Rabbit
Zinc compounds	1.0-5.0	Unknown	Unknown	Unknown
Ashless dithiocarbamate	<1.0	Unknown	>16000 mg/kg Rat	>2000 mg/kg Rabbit
4-hydroxy 4-methyl-2-pentanone (Diacetone alcohol)	<1.0	50 ppm-TWA	4000 mg/kg Rat	13500 mg/kg Rabbit

NON-HAZARDOUS INGREDIENTS:

ADDITIVES AND/OR OTHER INGREDIENTS: This product is a mixture. The specific chemical identity of hazardous ingredients and non-hazardous ingredients, their C.A.S. numbers and their exact percent of composition are proprietary to Lubrication Engineers®, Inc. and are being withheld as Trade Secrets. The above listing of hazardous ingredients discloses the properties, approximate concentration and known toxicological effects of the hazardous ingredients. This material is an automotive/industrial lubricant with a low order of toxicity and irritancy. The product is formulated with ingredients that are not designated as harmful to the ozone.

REGULATORY INFORMATION:

SARA Title III: This product does not contain any chemical substance on the SARA Extremely Hazardous Substances list. If this product contains any chemicals that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372, they will be listed in the above HAZARDOUS INGREDIENTS section.

TSCA: This material is in compliance with the Toxic Substances Control Act (15 USC 2601-2629) and all components of this product appear on the Toxic Substance Control Act (TSCA) inventory list.

Clean Air Act: No ozone depleting chemicals listed in Title VI, Stratospheric Ozone Protection, Section 602 of the Clean Air Act are present or used in the manufacturing process of this product.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: °F (Method) 0 (TCC)
FLAMMABLE LIMITS: LEL 1.0 % UEL 7.0 %

EXTINGUISHING MEDIA:
Foam, dry chemical, water fog, or carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURES:
Avoid possible accumulation of vapors at floor level, as vapor is heavier than air. Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Avoid possible bursting of aerosol can. Do not store where temperature may exceed 120 °F. Do not puncture or incinerate.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: (If Established)
Not established. Oil mist = 5mg/m³
400 ppm suggested

EFFECTS OF OVEREXPOSURE:

Inhalation and skin contact are the primary routes of entry, the product may cause mild dermatitis upon prolonged contact and is expected to be an eye and lung irritant. Any existing skin, eye, or lung irritation may be aggravated by direct contact. No components are listed on OSHA, I.A.R.C., or N.T.P. lists for carcinogens.

SECTION VI - EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT:

Flush immediately with water until irritation subsides.

SKIN CONTACT:

Wash affected skin area with mild soap and water. Remove soaked clothing to avoid prolonged skin contact.

INGESTION:

Do not induce vomiting. Contact a physician.

INHALATION:

Remove to fresh air. If not breathing, give artificial respiration. Contact a physician.

SECTION VII - REACTIVITY DATA

STABILITY: (Thermal, Light, Etc.)

Stable

CONDITIONS TO AVOID:

Contact with nuclear radiation and strong oxidizing materials.

INCOMPATIBILITY: (Materials to avoid)

Strong oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS:

Dense smoke; oxides of C, S, N, Zn and P; Ca compounds; hydrogen sulfide.

HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION VIII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Remove all sources of ignition. Treat as a petroleum oil spill.

WASTE DISPOSAL METHOD:

Used petroleum products may be recycled through re-refining processes.

SECTION IX - SPECIAL PROTECTION INFORMATION

EYE PROTECTION:

Sufficient to avoid direct contact.

SKIN PROTECTION:

Protective neoprene or plastic gloves may be desired.

RESPIRATORY PROTECTION:

Usually not needed in open, unconfined areas. If TLV is exceeded wear NIOSH approved self-contained breathing device or respirator.

VENTILATION:

Usually not needed in open, unconfined areas. In enclosed areas, sufficient ventilation to meet suggested TLV or 400 ppm is required.

Ventilation is necessary at floor level as vapors are heavier than air.

OTHER:

Usually not needed.

SECTION X - SPECIAL PRECAUTIONS

Do not store above 120 °F. Keep away from heat, sparks, open flames, and strong oxidants. Avoid eye contact and prolonged skin contact. Avoid breathing oil mists. Wash thoroughly after handling.

SECTION XI - HAZARD RATINGS

There are several recognized and accepted systems that assign hazard ratings to materials. Although this product has not been evaluated specifically against these systems, the ratings for the National Fire Protection Association (NFPA) and the National Paint and Coatings Association's Hazardous Material Identification System (HMIS) for the lubricant residue and as applied are:

	NFPA	HMIS
Health	2	2
Flammability	4	4
Reactivity	0	0