



SAFETY DATA SHEET

SDS: 4622

4622 MONOLEC® MULTIPLEX LUBRICANT

Issuing Date 04-24-2012

Revision Date 05-12-2020

Revision Number 4.1

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

Product Identifier**Product Name** 4622 MONOLEC® MULTIPLEX LUBRICANT**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)

SDS: 4622

4622 MONOLEC® MULTIPLEX LUBRICANT

Issuing Date 04-24-2012

Revision Date 05-12-2020

Revision Number 4.1

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 red**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

Chemical name	CAS No.	Weight-%
Petroleum distillates, hydrotreated heavy naphthenic	64742-52-5	40 - 50
Petroleum distillates, solvent dewaxed heavy	64742-65-0	30 - 40

SDS: 4622

4622 MONOLEC® MULTIPLEX LUBRICANT

Issuing Date 04-24-2012

Revision Date 05-12-2020

Revision Number 4.1

paraffinic		
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	10 - 20
Residual oils (petroleum), solvent dewaxed	64742-62-7	5 - 10
antimony dialkyldithiocarbamate	15890-25-2	1 - 5

The producer of "4622" declares that it contains less than 3% DMSO extractable material by IP-346

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 while 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	260 °C / 500 °F
Suitable Extinguishing Media	Water spray, Carbon dioxide (CO ₂), 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

SDS: 4622

4622 MONOLEC® MULTIPLEX LUBRICANT

Issuing Date 04-24-2012

Revision Date 05-12-2020

Revision Number 4.1

Personal precautions, protective equipment and emergency procedures

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

Environmental Precautions

Environmental Precautions Prevent entry into waterways, sewers, basements or confined 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, placing in appropriate containers 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 dialkyldithiocarbamate 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
Diphenylamine 122-39-4	TWA: 10 mg/m ³	(vacated) TWA: 10 mg/m ³	TWA: 10 mg/m ³
Phenol 108-95-2	TWA: 5 ppm S*	TWA: 5 ppm TWA: 19 mg/m ³ (vacated) TWA: 5 ppm (vacated) TWA: 19 mg/m ³ (vacated) S* S*	IDLH: 250 ppm Ceiling: 15.6 ppm Ceiling: 60 mg/m ³ TWA: 5 ppm TWA: 19 mg/m ³

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Eye protection not needed during typical product use conditions. Wear eye protection as

SDS: 4622

4622 MONOLEC® MULTIPLEX LUBRICANT

Issuing Date 04-24-2012

Revision Date 05-12-2020

Revision Number 4.1

appropriate when handling the bulk formulation.

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	Paste
appearance	red
Odor	Hydrocarbon-like
Odor threshold	No information available

Property**Property**

pH	6 - 8
Melting Point / Freezing Point	No data available
Boiling Point/Range	no data available
Flash Point	260 °C / 500 °F
Upper flammability limit:	No data available
Lower Flammability Limit	No data available
Vapor pressure	No data available
Vapor Density	< 1 (Air = 1)
Specific Gravity	0.95
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)**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.

SDS: 4622

4622 MONOLEC® MULTIPLEX LUBRICANT

Issuing Date 04-24-2012

Revision Date 05-12-2020

Revision Number 4.1

Eye Contact	Contact with eyes may cause irritation.
Skin Contact	May cause irritation.
Ingestion	There is no data available for this product.

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Petroleum distillates, hydrotreated heavy naphthenic 64742-52-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	> 15000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2400 mg/m ³ (Rat) 4 h
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	> 15 g/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Residual oils (petroleum), solvent dewaxed 64742-62-7	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2.18 mg/L (Rat) 4 h
antimony dialkyldithiocarbamate 15890-25-2	> 16400 mg/kg (Rat)	> 16000 mg/kg (Rabbit)	-

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 "4622" 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.

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, hydrotreated heavy naphthenic 64742-52-5	-	-	-	-

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)	17680 mg/kg
ATEmix (dermal)	7009 mg/kg
ATEmix (inhalation-dust/mist)	80.6 mg/l

12. ECOLOGICAL INFORMATION

SDS: 4622

4622 MONOLEC® MULTIPLEX LUBRICANT

Issuing Date 04-24-2012

Revision Date 05-12-2020

Revision Number 4.1

Ecotoxicity

Chemical name	Algae/aquatic plants	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to daphnia and other aquatic invertebrates
Petroleum distillates, hydrotreated heavy naphthenic 64742-52-5	-	-	-	-
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	-	-	-	-
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	-	-	-	-
Residual oils (petroleum), solvent dewaxed 64742-62-7	-	LC50> 5000 mg/L Oncorhynchus mykiss 96 h	-	EC50 > 1000 mg/L 48 h

Persistence and Degradability No information available.**Bioaccumulation** No information available.**Mobility** The product is insoluble and floats on water.**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.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Diphenylamine 122-39-4		Included in waste streams: F039, K083, K104		
Phenol 108-95-2	U188	Included in waste streams: F039, K001, K022, K087 Included in waste stream: K060		

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
antimony dialkyldithiocarbamate 15890-25-2	Toxic
Zinc diamyldithiocarbamate 15337-18-5	Toxic
Diphenylamine 122-39-4	Toxic
Phenol 108-95-2	Toxic Corrosive

SDS: 4622

4622 MONOLEC® MULTIPLEX LUBRICANT

Issuing Date 04-24-2012

Revision Date 05-12-2020

Revision Number 4.1

14. TRANSPORT INFORMATIONDOT Not regulated**15. REGULATORY INFORMATION****International Inventories**

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

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 %
antimony dialkyldithiocarbamate - 15890-25-2	15890-25-2	1.86	1.0
Zinc diamyldithiocarbamate - 15337-18-5	15337-18-5	0.2506	1.0
Diphenylamine - 122-39-4	122-39-4	0.0075	1.0
Phenol - 108-95-2	108-95-2	0.0004	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
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):

SDS: 4622

4622 MONOLEC® MULTIPLEX LUBRICANT

Issuing Date 04-24-2012

Revision Date 05-12-2020

Revision Number 4.1

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
antimony dialkyldithiocarbamate 15890-25-2		X		
Zinc diamyldithiocarbamate 15337-18-5		X		
Phenol 108-95-2	1000 lb	X	X	X

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phenol 108-95-2	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final 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

NFPA

Health hazard 1

Flammability 1

Stability 1

16. OTHER INFORMATION

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 Revision Date 05-12-2020
 Reason for revision General Information.

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