

SAFETY DATA SHEET

1. Identification of the substance or mixture and of the supplier

Product identifier

Product name: **LUBRIZOL® 2063 / 116612**

Additional identification

Chemical name: Mixture
CAS-No.: Not applicable.

Recommended use and restriction on use

Recommended use: OEM - General Industrial
Restrictions on use: None identified.

Details of the supplier of the safety data sheet

Supplier

Company Name: THE LUBRIZOL CORPORATION
Address: 29400 LAKELAND BOULEVARD
WICKLIFFE, OH 44092-2298
US
Telephone: (440)943-1200

Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300

2. Hazards Identification

Classification of the substance or mixture

Prepared according to Global Harmonized System (GHS) standards.

Flammable liquids	Category 3
Acute toxicity (Oral)	Category 5
Acute toxicity (Dermal)	Category 5
Acute toxicity (Inhalation - vapor)	Category 4
Serious Eye Damage/Eye Irritation	Category 2A

Label Elements



Signal Words: Warning

Hazard Statement(s): H226: Flammable liquid and vapor.
H303+H313: May be harmful if swallowed or in contact with skin.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.

Precautionary Statement

- Prevention:** P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground and bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting/equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P264: Wash hands thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/eye protection/face protection.
- Response:** P312: Call a POISON CENTER/doctor if you feel unwell.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P370+P378: In case of fire: Use CO₂, dry chemical or foam for extinction. Water can be used to cool and protect exposed material.
- Storage:** P403+P235: Store in a well-ventilated place. Keep cool.
- Disposal:** P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Other hazards which do not result in GHS classification:** None identified.

3. Composition/Information on Ingredients

Mixtures

Chemical name	CAS number	Percent by Weight
Polymeric phosphate ester	Not determined.	50 - 60%
Butyl cellosolve	111-76-2	40 - 50%

4. First aid measures

Description of first aid measures

- Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/.../if you feel unwell.
- Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Skin Contact:** Take off immediately all contaminated clothing. Wash with soap and water. Call a POISON CENTER/doctor/.../if you feel unwell.

Ingestion: Call a POISON CENTER/doctor/.../if you feel unwell.

Most important symptoms and effects, both acute and delayed: See section 11.

Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Extinguishing media

Suitable extinguishing media: CO₂, Dry chemical or Foam. Water can be used to cool and protect exposed material.

Unsuitable extinguishing media: Not determined.

Specific hazard arising from the chemical: Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations. Vapors may travel considerable distance to a source of ignition and flash back. See section 10 for additional information.

Advice for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up: Eliminate all ignition sources if safe to do so. Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

Reference to other sections: See sections 8 and 13 for additional information.

7. Handling and Storage:

Precautions for safe handling: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Ground and bond container and receiving equipment. Use only non-sparking tools. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling.
Minimize exposure to air. If peroxide formation is suspected, do not open or move container. Do not distill to near dryness. Distillation residues should be handled with caution until shown to be peroxide-free.

Maximum Handling Temperature: 30 °C 86 °F

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep cool. Store in a well-ventilated place. Prolonged contact with air may cause formation of explosive peroxides.

Maximum Storage Temperature: 30 °C 86 °F

8. Exposure Controls/Personal Protection

Control Parameters:

Occupational Exposure Limits

Chemical name	type	Exposure Limit Values	Source
Butyl cellosolve	TWA	20 ppm	US. ACGIH Threshold Limit Values (02 2012)

Appropriate engineering controls: Material should be handled in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation should be used at points where dust, mist, vapors or gases can escape into the room air. Use explosion-proof ventilation equipment to stay below exposure limits.

Individual protection measures, such as personal protective equipment

General information: Use explosion-proof ventilation equipment. 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.

Eye/face protection: Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

Skin protection

Hand Protection: Use nitrile or neoprene gloves. Use good industrial hygiene practices. In case of skin contact, wash hands and arms with soap and water.

Other: Chemical resistant boots. Wear apron or protective clothing in case of contact.

Respiratory Protection: Use respirator with a combination organic vapor and dust/mist cartridge. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

Hygiene measures: Observe good industrial hygiene practices. When using do not smoke.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Light colored

Odor: Very strong

Odor Threshold: No data available.

pH: No data available.

Freezing point: No data available.

Boiling Point: > 169 °C

Flash Point: 58 °C (Pensky-Martens Closed Cup)

Evaporation Rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability Limit - Upper (%): No data available.

Flammability Limit - Lower (%): No data available.

Vapor pressure: 273,6 torr (120 °C)

Vapor density (air=1): No data available.

Relative density: 1,06 - 1,12 (25 °C)

Solubility(ies)

Solubility in Water: Slightly Soluble

Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.

Autoignition Temperature: No data available.

Decomposition Temperature: No data available.

Viscosity: 725 mm²/s (40 °C); 45 mm²/s (100 °C)

Explosive properties: No data available.

Oxidizing properties: No data available.

Pour Point Temperature No data available.

Other information

VOC Content: 42 %

Percent volatile: 42 % (Percent by Weight)

10. Stability and Reactivity

Reactivity: No data available.

Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Will not occur.
Conditions to avoid:	Heat, sparks, flames.
Incompatible Materials:	Alkalies. Strong acids. Aluminum.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological Information

Information on likely routes of exposure

Inhalation:	Harmful if inhaled.
Ingestion:	May be harmful if swallowed.
Skin Contact:	May be harmful in contact with skin.
Eye contact:	Causes serious eye irritation.

Information on toxicological effects

Acute toxicity

Oral

Product: LD 50 (Rat): > 2 000 - 5 000 mg/kg (Read across)
Ingestion can cause central nervous system effects such as headache, dizziness, drowsiness, and generalized weakness. Ingestion may cause red blood cell hemolysis and possible liver and kidney injury.

Dermal

Product: May be harmful through skin absorption.
ATEmix 2 000 - 5 000 mg/kg.

Inhalation

Product: High concentrations may cause headaches, dizziness, weakness, irritability and other behavioral changes, nausea, and vomiting.
ATEmix (, 4 h): 10 - 20 mg/l. Vapour

Skin Corrosion/Irritation:

Product: Classification: Not irritating (Read across); Rabbit.
Remarks: Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
Not classified as a primary skin irritant.

Serious Eye Damage/Eye Irritation:

Product: Remarks: Causes serious eye irritation.

Respiratory sensitization:

No data available

Skin sensitization:

Butyl cellosolve Classification: Not a skin sensitizer. (Literature) Not a skin sensitizer.

Specific Target Organ Toxicity - Single Exposure:

Butyl cellosolve Nose, throat and lung irritant.

Aspiration Hazard:

No data available

Other effects:

Butyl cellosolve Central nervous system

Chronic Effects

Carcinogenicity:

Product: Not available.

Butyl cellosolve Butyl cellosolve: A National Toxicology Program (NTP) chronic inhalation study revealed some evidence of carcinogenic activity in male and female mice, equivocal evidence in female rats. and no evidence in male rats.

Germ Cell Mutagenicity:

Polymeric phosphate ester The Ames Salmonella test for mutagenicity was negative for this product.

Butyl cellosolve This material has not exhibited mutagenic or genotoxic potential in laboratory tests.

Reproductive toxicity:

Butyl cellosolve Based on available data this product is not expected to be classified a reproductive hazard. Butyl cellosolve causes fetotoxicity in lab animals at doses which are maternally toxic.

Specific Target Organ Toxicity - Repeated Exposure:

Butyl cellosolve Repeated overexposure may result in liver and kidney damage.
Dermal: Target Organ(s): Blood
Inhalation: Target Organ(s): Blood
Oral: Target Organ(s): Blood

12. Ecological Information

Ecotoxicity

Fish

Product: LC 50 (Rainbow Trout, 4 d): > 1 000 mg/l

Butyl cellosolve LC 50 (Bluegill Sunfish, 4 d): 1 490 mg/l
LC 50 (Rainbow Trout, 4 d): 1 471 mg/l
LC 50 (Zebra Fish, 21 d): > 100 mg/l
NOEC (Zebra Fish, 21 d): > 100 mg/l

Aquatic Invertebrates

Product: EC 50 (Water flea (Daphnia magna), 2 d): 350 mg/l

Butyl cellosolve
EC 50 (Water flea (Daphnia magna), 2 d): 1 550 mg/l
EC 50 (Water flea (Daphnia magna), 21 d): 297 mg/l
NOEC (Water flea (Daphnia magna), 21 d): 100 mg/l

Toxicity to Aquatic Plants

Butyl cellosolve
EC 50 (Green algae (Selenastrum capricornutum), 3 d): 911 mg/l
EC 50 (Green algae (Selenastrum capricornutum), 7 d): > 1 000 mg/l
NOEC (Green algae (Selenastrum capricornutum), 3 d): 88 mg/l

Toxicity to soil dwelling organisms

No data available

Sediment Toxicity

No data available

Toxicity to Terrestrial Plants

No data available

Toxicity to Above-Ground Organisms

No data available

Toxicity to microorganisms

Butyl cellosolve
EC 50 (Sludge, 0,1 d): > 1 000 mg/l

Persistence and Degradability**Biodegradation**

Butyl cellosolve
OECD TG 302 B, 100 %, 28 d, Readily biodegradable
OECD TG 301 E, 95 %, 28 d, Readily biodegradable
OECD TG 301 B, 90,4 %, 28 d, Readily biodegradable

Bioaccumulative Potential**Bioconcentration Factor (BCF)**

No data available

Partition Coefficient n-octanol / water (log Kow)

Butyl cellosolve
Log Kow: 0,81 (Measured)

Mobility:

No data available

Other Adverse Effects:

No data available.

13. Disposal Considerations**Disposal methods:**

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty containers retain material residue. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition.

Contaminated Packaging:

Container packaging may exhibit hazards.

14. Transport Information

IATA

UN Number:	UN 1993
Proper Shipping Name:	Flammable liquid, n.o.s.(Polymeric phosphate ester)
Transport Hazard Class(es):	
Class:	3
Label(s):	3
Marine Pollutant:	No
Packing Group:	III
Limited quantity	10,00L
Excepted quantity	E1
Environmental Hazards	Not regulated.
Special precautions for user:	None established
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

International standards

IMDG

UN Number:	UN 1993
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S.(Polymeric phosphate ester)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
EmS No.:	F-E, S-E
Packing Group:	III
Marine Pollutant:	No
Limited quantity	5,00L
Excepted quantity	E1
Special precautions for user:	None established

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. For transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Inventory Status

Australia (AICS)

This product contains a substance that is not listed on the Australia Inventory of Chemical Substances.

Canada (DSL/NDSL)

All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union (REACH)

To obtain information on the REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Japan (ENCS)

This product contains a substance that is not listed on the Japanese Existing and New Chemical Substances (ENCS) list.

Korea (ECL)

All components are in compliance in Korea.

New Zealand (NZIoC)

All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)

All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Taiwan (TCSCA)

All components of this product are listed on the Taiwan inventory.

United States (TSCA)

All components of this material are on the US TSCA Inventory.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

16. Other Information

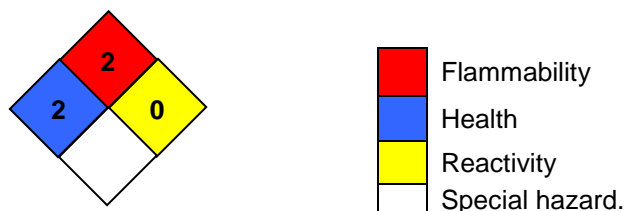
Key literature references and sources for data: Internal company data and other publically available resources.

HMIS Hazard ID

Health	* 2
Flammability	2
Physical Hazards	0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 17.08.2016

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