

SECTION 1. Product and company identification

| | |
|------------------------|--|
| Chemical type | : Mixture |
| Trade name | : JL-M Lubricant |
| Company identification | : Superbolt, Inc. 1000 Gregg Street Carnegie, PA 15106 T (412) 279-1149 www.nord-lock.com/ |
| Emergency number | : (412) 279-1149 (Monday- Friday from 7:30 am – 4:30 pm; North American Eastern Time Zone) |

SECTION: 2. Hazards identification

2.1. Emergency Overview

| | |
|----------------|-----------------------|
| Physical state | : Solid |
| Appearance | : Paste |
| Colour | : Dark grey |
| Odour | : Mild petroleum odor |

HAZARD : May cause cancer

Quartz(14808-60-7)

| | |
|--|--|
| IARC group | 1 - Carcinogenic to Humans |
| National Toxicity Program (NTP) Status | 2 - Known Human Carcinogens |
| | In OSHA Hazard Communication Carcinogen list |

2.2. OSHA Regulatory Status

OSHA regulation Status : This material is classified as hazardous under OSHA regulation

2.3. Potential health effects

| | |
|--------------------------------------|---|
| Symptoms/injuries | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Symptoms/injuries after inhalation | : Not expected to present a significant inhalation hazard under anticipated conditions of normal use. |
| Symptoms/injuries after skin contact | : May cause skin irritation. |
| Symptoms/injuries after eye contact | : Symptoms include : Redness. Blurred vision. |
| Symptoms/injuries after ingestion | : Not expected to present a significant ingestion hazard under anticipated conditions of normal use. |

2.4. Potential environmental effects

No additional information available

SECTION: 3. Composition/information on ingredients

| Name | CAS No. | % |
|---|------------|-------|
| Molybdenum Disulfide | 1317-33-5 | < 60 |
| Distillates (petroleum), hydrotreated heavy paraffinic | 64742-54-7 | < 35 |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | 64742-65-0 | |
| Graphite | 7782-42-5 | < 15 |
| Quartz | 14808-60-7 | < 0.5 |

SECTION: 4. First aid measures

4.1. First aid procedures

| | |
|---------------------------------------|--|
| First-aid measures general | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). |
| First-aid measures after inhalation | : Assure fresh air breathing. Allow the victim to rest. |
| First-aid measures after skin contact | : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation persists, seek medical attention. |
| First-aid measures after eye contact | : Rinse immediately with plenty of water, also under the eyelids. Obtain medical attention if pain, blinking or redness persist. |
| First-aid measures after ingestion | : Rinse mouth. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Obtain emergency medical attention. |

4.2. Note to physicians

Treat symptomatically.

JL-M Lubricant

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according to ANSI Z400.1

SECTION: 5. Firefighting measures

5.1. Flammable properties

| | |
|------------------|---|
| Fire hazard | : Decomposition products may be a hazard to health. |
| Explosion hazard | : Exposure to fire may cause containers to rupture/explode. |
| Reactivity | : Stable under normal conditions of use. |

5.2. Extinguishing media

| | |
|--------------------------------|--|
| Suitable extinguishing media: | : Foam. Dry powder. Carbon dioxide. Water spray. Sand. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.3. Protection for firefighters

| | |
|---------------------------------------|---|
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment. |
| Protective equipment for firefighters | : Do not enter fire area without proper protective equipment, including respiratory protection. |

SECTION: 6. Accidental release measures

6.1. Personal precautions

6.1.1. For non-emergency personnel

| | |
|----------------------|--|
| Protective equipment | : Wear suitable protective clothing gloves, and eye/face protection. |
| Emergency procedures | : Evacuate unnecessary personnel. |

6.1.2. For emergency responders

| | |
|----------------------|---|
| Protective equipment | : Equip cleanup crew with proper protection. Wear suitable protective clothing, gloves and eye/face protection. |
| Emergency procedures | : Ventilate area. |

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods for containment

No additional information available

6.4. Methods for clean up

| | |
|-------------------------|--|
| Methods for cleaning up | : Clean spills promptly. Wear proper protective equipment. Dispose in a safe manner in accordance with local/national regulations. |
|-------------------------|--|

6.5. Other information

See Heading 8. Exposure controls and personal protection.

6.6. Spill or leak statements by type of chemical

No additional information available

SECTION: 7. Handling and storage

7.1. Handling

| | |
|-------------------------------|--|
| Precautions for safe handling | : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapour. |
| Hygiene measures | : Handle in accordance with good industrial hygiene and safety practices. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. |

7.2. Storage

| | |
|------------------------|--|
| Storage condition(s) | : Keep only in the original container in a cool, well ventilated place away from : open sparks and flame. Keep container closed when not in use. |
| Incompatible products | : Strong oxidizing agents. |
| Incompatible materials | : Sources of ignition. Direct sunlight. |

SECTION: 8. Exposure controls/personal protection

8.1. Exposure guidelines

| Molybdenum Disulfide (1317-33-5) | | |
|--|-------------------------------------|--|
| ACGIH | ACGIH TWA (mg/m ³) | 10 mg/m ³ (inhalable fraction) |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 15 mg/m ³ (insoluble compounds, total dust) |
| Québec | VECD (mg/m ³) | 10 mg/m ³ (insoluble compounds) |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 5 mg/m ³ |
| ACGIH | ACGIH STEL (mg/m ³) | 10 mg/m ³ |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 5 mg/m ³ |
| Québec | VECD (mg/m ³) | 10 mg/m ³ (Mineral oil - dust) |

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| Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) | | |
|--|--------------------------------------|---|
| Québec | VEMP (mg/m ³) | 5 mg/m ³ (Mineral oil - dust) |
| Graphite (7782-42-5) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 2 mg/m ³ (respirable fraction) |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 2.5 mg/m ³ (respirable fraction) |
| OSHA | OSHA PEL (TWA) (mg/m ³) | 5 mg/m ³ (respirable fraction) |
| Québec | VECD (mg/m ³) | 2 mg/m ³ (respirable dust) |
| Quartz (14808-60-7) | | |
| ACGIH | ACGIH TWA (mg/m ³) | 0.025 mg/m ³ |
| IDLH | US IDLH (mg/m ³) | 50 mg/m ³ |
| NIOSH | NIOSH REL (TWA) (mg/m ³) | 0.05 mg/m ³ |
| Québec | VEMP (mg/m ³) | 0.1 mg/m ³ |

8.2. Engineering controls

Appropriate engineering controls : Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3. Personal protective equipment (PPE)

Personal protective equipment : Protective goggles. Gloves.



Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Respiratory protection : An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits.

SECTION: 9. Physical and chemical properties

Physical state : Solid
Appearance : Paste.
Colour : Dark grey.
odour : Mild petroleum odor.
Odour threshold : No data available
pH : Not applicable
Melting point : No data available
Freezing point : No data available
Boiling point : > 315 °C (600°F)
Flash point : 190 °C (374°F)
Relative evaporation rate (butylacetate=1) : No data available
Flammability (solid, gas) : No data available
Explosive limits : No data available
Vapour pressure : < 0.1 mm Hg
Relative vapour density at 20 °C : > 2 (Air = 1)
Relative density : 4.8
Solubility : Water: Negligible in water
Log Pow : No data available
Self ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Explosive properties : Not explosive.
Oxidising properties : Not oxidizing.

No additional information available

SECTION: 10. Stability and reactivity

10.1. Chemical stability

Stable under normal conditions of use.

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according to ANSI Z400.1

10.2. Conditions to avoid

Heat, open flame, sparks, hot surfaces, ignition sources, elevated temperature.

10.3. Incompatible materials

Strong oxidizing agents.

10.4. Hazardous decomposition products

On combustion, forms: fume. Carbon monoxide. Carbon dioxide. Sulfur oxides. Aldehydes. Nitrogen oxides (NOx).

10.5. Possibility of hazardous reactions

Product will not undergo polymerization.

SECTION: 11. Toxicological information

Information on toxicological effects

Acute toxicity : Not classified
Based on available data, the classification criteria are not met

| Molybdenum Disulfide (1317-33-5) | |
|--|---|
| LC50 inhalation rat (mg/l) | > 2820 mg/m ³ (Exposure time: 4 h) |
| Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0) | |
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rabbit | > 5000 mg/kg |
| LC50 inhalation rat (mg/l) | > 4.7 mg/l (Exposure time: 4 h) |
| Quartz (14808-60-7) | |
| LD50 oral rat | 500 mg/kg |

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : May cause cancer

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION: 12. Ecological information

12.1 Ecotoxicity

| Petroleum distillates, hydrotreated heavy paraffinic(64742-54-7) | |
|---|--|
| LC50 fish | > 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss) |
| EC50 Daphnia | > 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| Distillates, petroleum, solvent-dewaxed heavy paraffinic(64742-65-0) | |
| LC50 fish | > 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss) |
| EC50 Daphnia | > 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna) |

12.2. 12.2. Persistence and degradability

| JL-M Lubricant | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

12.3. Bioaccumulation/Accumulation

| JL-M Lubricant | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

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12.4. Mobility in environmental media

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION: 13. Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION: 14. Transport information

14.1. Basic shipping description

No additional information available

14.2 Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION: 15. Regulatory information

15.1. US Federal regulations

Molybdenum Disulfide (1317-33-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Petroleum distillates, hydrotreated heavy paraffinic (64742-54-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Graphite (7782-42-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Quartz (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Molybdenum Disulfide (1317-33-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification : Uncontrolled product according to WHMIS classification criteria

Petroleum distillates, hydrotreated heavy paraffinic (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Graphite (7782-42-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification : Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Quartz (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification : Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

EU-Regulations

Molybdenum Disulfide (1317-33-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

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Petroleum distillates, hydrotreated heavy paraffinic (64742-54-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

Graphite (7782-42-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

Quartz (14808-60-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

Molybdenum Disulfide (1317-33-5)

Listed on the AICS (the Australian Inventory of Chemical Substances).
Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on New Zealand - Inventory of Chemicals (NZIoC)
Listed on Inventory of Chemicals and Chemical Substances (PICCS)
Pollutant Release and Transfer Register Law (PRTR Law)

Petroleum distillates, hydrotreated heavy paraffinic (64742-54-7)

Listed on the AICS (the Australian Inventory of Chemical Substances).
Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on New Zealand - Inventory of Chemicals (NZIoC)
Listed on Inventory of Chemicals and Chemical Substances (PICCS)

Distillates, petroleum, solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on the AICS (the Australian Inventory of Chemical Substances).
Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on New Zealand - Inventory of Chemicals (NZIoC)
Listed on Inventory of Chemicals and Chemical Substances (PICCS)

Graphite (7782-42-5)

Listed on the AICS (the Australian Inventory of Chemical Substances).
Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on New Zealand - Inventory of Chemicals (NZIoC)
Listed on Inventory of Chemicals and Chemical Substances (PICCS)

Quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)
Listed on the AICS (the Australian Inventory of Chemical Substances).
Listed on Inventory of Existing Chemical Substances (IECSC)
Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
Listed on the Korean ECL (Existing Chemical List) inventory.
Listed on New Zealand - Inventory of Chemicals (NZIoC)
Listed on Inventory of Chemicals and Chemical Substances (PICCS)
Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

Molybdenum Disulfide (1317-33-5)

| | |
|----------------------------|--|
| State or local regulations | U.S. - Massachusetts - Right To Know List U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term |
|----------------------------|--|

Petroleum distillates, hydrotreated heavy paraffinic(64742-54-7)

| | |
|----------------------------|---|
| State or local regulations | U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term |
|----------------------------|---|

Distillates, petroleum, solvent-dewaxed heavy paraffinic(64742-65-0)

| | |
|----------------------------|---|
| State or local regulations | U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term |
|----------------------------|---|

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| Graphite(7782-42-5) | |
|----------------------------|--|
| State or local regulations | U.S. - Hawaii - Occupational Exposure Limits - TWAs U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts U.S. - Idaho - Occupational Exposure Limits - TWAs U.S. - Massachusetts - Right To Know List U.S. - Michigan - Occupational Exposure Limits - TWAs U.S. - Minnesota - Hazardous Substance List U.S. - Minnesota - Permissible Exposure Limits - TWAs U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New York - Occupational Exposure Limits - Mineral Dusts U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts U.S. - Oregon - Permissible Exposure Limits - TWAs U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Tennessee - Occupational Exposure Limits - TWAs U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term U.S. - Vermont - Permissible Exposure Limits - TWAs U.S. - Washington - Permissible Exposure Limits - STELs U.S. - Washington - Permissible Exposure Limits - TWAs U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet |

| Quartz (14808-60-7) | |
|--|-----|
| U.S. - California - Proposition 65 - Carcinogens List | Yes |
| U.S. - Hawaii - Occupational Exposure Limits - TWAs U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs) U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts U.S. - Illinois - Toxic Air Contaminant Carcinogens U.S. - Maine - Chemicals of High Concern U.S. - Massachusetts - Right To Know List U.S. - Michigan - Occupational Exposure Limits - TWAs U.S. - Minnesota - Chemicals of High Concern U.S. - Minnesota - Hazardous Substance List U.S. - Minnesota - Permissible Exposure Limits - TWAs U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New Jersey - Special Health Hazards Substances List U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Rhode Island - Hazardous Substance List U.S. - Tennessee - Occupational Exposure Limits - TWAs U.S. - Texas - Effects Screening Levels - Long Term U.S. - Texas - Effects Screening Levels - Short Term U.S. - Vermont - Permissible Exposure Limits - TWAs U.S. - Washington - Permissible Exposure Limits - STELs U.S. - Washington - Permissible Exposure Limits - TWAs | |

SECTION: 16. Other information

Sources of Key data : Supplier information

JL-M Lubricant

Safety Data Sheet

according to ANSI Z400.1

Abbreviations and acronyms

: ATE - acute toxicity estimate
BCF - bioconcentration factor
CAS - Chemical Abstracts Service
CLP - Classification, Labelling and Packaging
CSR - Chemical Safety Report
GHS - Globally Harmonised System
MSDS - Material Safety Data Sheet
Overland transport (ADR)
PBT - Persistent, Bioaccumulative and Toxic substance
PEL - Permissible Exposure Level
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals
Relat - Relative
SDS - Safety Data Sheet
STEL - Short-Term Exposure Limit
TLV - Threshold Limit Value
TWA - Time Weighted Average
UVCB - Substances of Unknown or Variable composition, Complex reaction products or Biological materials
vPvB - Very Persistent and Very Bioaccumulative

Other information

: None.

NPFA Rating

NPFA health hazard

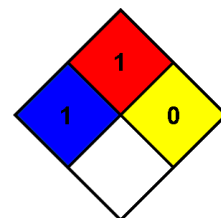
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NPFA fire hazard

: 1 - Must be preheated before ignition can occur.

NPFA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health

: 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

: 1 Slight Hazard

Personal Protection

: B

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.