SAFETY DATA SHEET



Section 1. Identification

Product name	Molub-Alloy OG 9002 Heavy	
SDS #	468776	
Code	468776-US69	
Relevant identified uses of	the substance or mixture and uses advised against	
Product use	Grease for industrial applications For specific application advice see appropriate Technical Data Sheet or consult our company representative.	
Supplier	BP Lubricants USA Inc. 1500 Valley Road Wayne, NJ 07470 Telephone: +1-888-CASTROL Product Information: +1-877-641-1600	
EMERGENCY HEALTH INFORMATION:	+1-800-447-8735	
EMERGENCY SPILL INFORMATION:	+1-800-424-9300 (CHEMTREC USA) +1-703-527-3887 (CHEMTREC outside the US)	

Section 2. Hazards identification

OSHA/HCS status	This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the	Not classified.
substance or mixture	
GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Hazards not otherwise	Defatting to the skin.
classified	Note: High Pressure Applications
	Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency.
	See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Section 3. Composition/information on ingredients

Substance/mixture

Mixture

Highly refined mineral oil and additives. Thickening agent.

Product name	Molub-Alloy OG 9002 Heavy	
Version 3.02	Date of issue 12/18/2019.	

Section 3. Composition/information on ingredients

Ingredient name	CAS number	%
Distillates (petroleum), solvent-refined heavy naphthenic	64741-96-4	≥10 - ≤25
graphite, synthetic	7782-42-5	≥10 - ≤25
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	≥10 - ≤25
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	≤10
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	≤5
tris(dipentyldithiocarbamato-S,S')antimony	15890-25-2	≤3
Molybdenum disulfide	1317-33-5	≤3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Skin contact	Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.
Inhalation	If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes. No specific treatment.

Section 5. Fire-fighting measures

Extinguishing media Suitable extinguishing media	In case of fire, use water extinguisher or spray.	fog, alcohol resistant foa	m, dry chemical or	carbon dioxide
Unsuitable extinguishing media	Do not use water jet.			
Specific hazards arising In a fire or if heated, a from the chemical		essure increase will occu	r and the container	may burst.
Product name Molub-Allov (Product code	468776-US69	Page: 2/10

Product name Molub-Alloy OG 9002 Heavy	Product code	468776-US69	Page: 2/10
Version 3.02 Date of issue 12/18/2019.	Format US	Languag	ge ENGLISH

Section 5. Fire-fighting measures

Hazardous combustion products	Combustion products may include the following: metal oxide/oxides carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide) sulfur oxides (SO, SO ₂ etc.) nitrogen oxides (NO, NO ₂ etc.)
Special protective actions for fire-fighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protecti	ve equipment and emergency procedures
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for cor	ntainment and cleaning up
Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. If emergency personnel are unavailable, contain spilled material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Sistillates (petroleum), solvent-refined heavy naphthenic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 6/1993
graphite, synthetic	ACGIH TLV (United States). TWA: 2 mg/m ³ 8 hours. Issued/Revised: 9/1994 Form: Respirable fraction OSHA PEL Z3 (United States). TWA: 15 mppcf 8 hours. Issued/Revised: 9/1997
Distillates (petroleum), hydrotreated heavy naphthenic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 6/1993
Distillates (petroleum), hydrotreated light naphthenic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 6/1993
Distillates (petroleum), hydrotreated heavy naphthenic	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States). TWA: 5 mg/m ³ 8 hours. Issued/Revised: 6/1993
tris(dipentyldithiocarbamato-S,S')antimony	ACGIH TLV (United States). TWA: 0.5 mg/m ³ , (as Sb) 8 hours. Issued/ Revised: 9/1994 OSHA PEL (United States). TWA: 0.5 mg/m ³ , (as Sb) 8 hours. Issued/ Revised: 6/1993
Molybdenum disulfide	ACGIH TLV (United States). TWA: 10 mg/m ³ , (as Mo) 8 hours. Issued/ Revised: 2/2001 Form: Inhalable fraction TWA: 3 mg/m ³ , (as Mo) 8 hours. Issued/ Revised: 2/2001 Form: Respirable fraction OSHA PEL (United States). TWA: 15 mg/m ³ , (as Mo) 8 hours. Issued/ Revised: 6/1993 Form: Total dust

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Product code 468776-US69

Section 8. Exposure controls/personal protection

Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety glasses with side shields.
Skin protection	
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
Body protection	Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m3), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m3). Where organic vapours are a potential hazard during metalworking operations, a combination particulate and organic vapour filter may be necessary. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Product code 468776-US69

Language ENGLISH

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	Grease
Color	Black. [Dark]
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point	Not available.
Boiling point	Not available.
Flash point	Open cup: 193°C (379.4°F) [Cleveland.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Density	>1000 kg/m³ (>1 g/cm³) at 25°C
Solubility	insoluble in water.
Partition coefficient: n- octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	No specific data.
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Name		Resu	lt	
Distillates (petroleum), hydro	treated light naphthenio	c ASPIF	RATION HAZARD - (Category 1
Information on the likely routes of exposure	Routes of entry an	nticipated: Dermal, Inhalation.		
Potential acute health effects	<u>}</u>			
Eye contact	No known significa	ant effects or critical hazards.		
Skin contact	No known significa	ant effects or critical hazards.		
Product name Molub-Alloy	OG 9002 Heavy	Product code	468776-US69	Page: 6/10
Version 3.02 Date of issue	12/18/2019.	Format US	Langua	ge ENGLISH

Inhalation	Exposure to decomposition products may cause a health hazard. be delayed following exposure.	Serious effects may
Ingestion	No known significant effects or critical hazards.	
Symptoms related to the phys	ical, chemical and toxicological characteristics	
Eye contact	No specific data.	
Skin contact	Adverse symptoms may include the following: irritation dryness cracking	
Inhalation	No specific data.	
Ingestion	No specific data.	
Potential immediate effects	Not available.	
Delayed and immediate effect Short term exposure	s and also chronic effects from short and long term exposure	
Potential delayed effects Long term exposure	Not available.	
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health effe	<u>cts</u>	
General	No known significant effects or critical hazards.	
Carcinogenicity	No known significant effects or critical hazards.	
	No known significant effects or critical hazards.	
Mutagenicity		
	No known significant effects or critical hazards.	
Mutagenicity	•	

Numerical measures of toxicity Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

Persistence and degradability

Not expected to be rapidly degradable.

Bioaccumulative potential

Not available.

Mobility in soil	
Soil/water partition coefficient (Koc)	Not available.
Mobility	Non-volatile. Grease. insoluble in water.
Other adverse effects	No known significant effects or critical hazards.

Product name Molub-Alloy OG 9002 Heavy	Product code	468776-US69	Page: 7/10
Version 3.02 Date of issue 12/18/2019.	Format US	Language	ENGLISH

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

Special precautions for user

Not available.

Transport in bulk according Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b) All components are active or exempted.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification

Not applicable.

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	tris(dipentyldithiocarbamato-S,S')antimony	15890-25-2	2.4
Supplier notification	tris(dipentyldithiocarbamato-S,S')antimony	15890-25-2	2.4

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Product name Molub-Alloy OG 9002 Heavy	Product code	468776-US69	Page: 8/10
Version 3.02 Date of issue 12/18/2019.	Format US	Languag	e ENGLISH

Section 15. Regulatory information

State regulations	
Massachusetts	The following components are listed: OIL MIST, MINERAL; GRAPHITE (NATURAL) DUST; OIL MIST, MINERAL; OIL MIST, MINERAL; MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC; MOLYBDENUM DISULFIDE
New Jersey	The following components are listed: GRAPHITE (NATURAL); GRAPHITE; ANTIMONY compounds
Pennsylvania	The following components are listed: GRAPHITE; GRAPHITE (SYNTHETIC); ANTIMONY COMPOUNDS
California Prop. 65	
ARNING: This pro	duct can expose you to chemicals including Ethylbenzene. Cumene and Ethyl acrylate, which are

MARNING: This product can expose you to chemicals including Ethylbenzene, Cumene and Ethyl acrylate, which are known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Other regulations

Australia inventory (AICS)	All components are listed or exempted.
Canada inventory	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	M components are listed or exempted.
REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.

Section 16. Other information

National Fire Protection Association (U.S.A.)



<u>History</u>	
Date of issue/Date of revision	12/18/2019.
Date of previous issue	11/07/2019.
Prepared by	Product Stewardship
Key to abbreviations	ACGIH = American Conference of Industrial Hygienists ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS Number = Chemical Abstracts Service Registry Number GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) OEL = Occupational Exposure Limit SDS = Safety Data Sheet STEL = Short term exposure limit TWA = Time weighted average UN = United Nations UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods. Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7,

Product name Molub-Alloy OG 9002 Heavy	Product code	468776-US69 Page: 9/10	
Version 3.02 Date of issue 12/18/2019.	Format US	Language ENGLISH	

Section 16. Other information

64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

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