SAFETY DATA SHEET



Molub-Alloy 1000 HT

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier Molub-Alloy 1000 HT

SDS# 468901 **Historic SDS #:** 73675

Code 468901-US17

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.

BP Lubricants USA Inc. **Manufacturer**

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Telephone: +1-888-CASTROL

Product Information: +1-877-641-1600

Supplier PAN AMERICAN ENERGY LLC, SUCURSAL

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PISO 11 - C1001AAT

CIUDAD AUTÓNOMA DE BUENOS AIRES.

Consultas Técnicas 0800-888-8088

EMERGENCY HEALTH

TELÉFONO PARA EMERGENCIAS (24 HORAS) CIQUIME: 0800-222-2933

INFORMATION:

+1-800-424-9300 (CHEMTREC USA)

+1-703-527-3887 (CHEMTREC outside the US)

EMERGENCY TELEPHONE

NUMBER

SECTION 2: Hazards identification

Classification of the substance or mixture Not classified.

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. Not applicable. **Storage Disposal** Not applicable. Defatting to the skin.

Other hazards which do not

Note: High Pressure Applications result in classification

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.

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SECTION 3: Composition/information on ingredients

Substance/mixture Mixture

Synthetic lubricant and additives. Thickening agent.

Other means of

Not available.

identification

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment 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-aidersNo 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.

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.

Specific treatments No specific treatment.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing

media

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable extinguishing

media

Do not use water jet.

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SECTION 5: Firefighting measures

Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

Combustion products may include the following:

carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)

nitrogen oxides (NO, NO2 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, protective 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 containment 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.

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SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name

None.

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 Skin protection Hand protection

Safety glasses with side shields.

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.

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SECTION 8: Exposure controls/personal protection

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.

SECTION 9: Physical and chemical properties

Appearance

Physical state
Color
Black. [Dark]
Odor
Mot available.
Odor threshold
Ph
Not available.
Not available.
Melting point
Not available.
Not available.
Not available.
Not available.

Flash point Open cup: 299°C (570.2°F) [Cleveland.]

Evaporation rate Not available.

Flammability (solid, gas) Not applicable. Based on - Physical state

Lower and upper explosive

(flammable) limits

Not available.

Vapor pressureNot available.Vapor densityNot available.

Density <1000 kg/m³ (<1 g/cm³) at 25°C

Solubility insoluble in water.

Partition coefficient: n- Not available.

octanol/water

A.-.ta lauditan tanan

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.

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SECTION 10: Stability and reactivity

Incompatible materials Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition Under normal conditions of storage and use, hazardous decomposition products

products should not be produced.

SECTION 11: Toxicological information

Information on toxicological effects

Information on the likely

routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Skin contact Defatting to the skin. May cause skin dryness and irritation.

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Ingestion No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data.

Skin contact Adverse symptoms may include the following:

irritation dryness cracking

InhalationNo specific data.IngestionNo specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate No.

effects

Not available.

Not available.

Potential delayed effects

Long term exposure

Potential immediate

Not available.

effects

Potential delayed effects Not available.

Potential chronic health effects

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route

Not available.

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SECTION 11: Toxicological information

SECTION 12: Ecological information

Toxicity

Environmental effects No known significant effects or critical hazards.

Persistence and degradability

Not expected to be rapidly degradable.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)

Not available.

Mobility Grease. insoluble in water.

Other adverse effects No known significant effects or critical hazards.

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

	ADR/RID	ADN	IMDG	IATA/ICAO
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	-	-	-	-

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SECTION 14: Transport information

Special precautions for user

Not available.

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not available.

SECTION 15: Regulatory information

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Other regulations

Australia inventory (AICS) All components are listed or exempted.

Canada inventory At least one component is not listed in DSL but all such components are listed in

NDSL.

China inventory (IECSC)

Japan inventory (ENCS)

Korea inventory (KECI)

Philippines inventory

All components are listed or exempted.

All components are listed or exempted.

All components are listed or exempted.

At least one component is not listed.

(DICCE)

(PICCS)

All components are listed or exempted.

Taiwan Chemical Substances Inventory

(TCSI)

United States inventory

(TSCA 8b)

All components are active 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

History

Date of issue/Date of

11/20/2019.

revision

Date of previous issue 06/18/2018.

Prepared by

Product Stewardship

Key to abbreviations ADN = European Provisions concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous

Goods by Road

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

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SECTION 16: Other information

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

VOC = Volatile Organic Compound

Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4,

 $64741-97-5,\ 64742-01-4,\ 64742-44-5,\ 64742-45-6,\ 64742-52-5,\ 64742-53-6,$

64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7,

64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0,

72623-87-1, 74869-22-0, 90669-74-2

✓ Indicates information that has changed from previously issued version.

Notice to reader

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