## Section 1. Identification

| Product name | Molub-Alloy OG 8031/2200-00 |
| :--- | :--- |
| SDS \# | 468693 |
| Code | $468693-$ US69 |

## Section 2. Hazards identification

OSHA/HCS status

Classification of the substance or mixture

GHS label elements
Signal word
Hazard statements
Precautionary statements Prevention
Response
Storage
Disposal
Hazards not otherwise
classified

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Not classified.

No signal word.
No known significant effects or critical hazards.

Not applicable.
Not applicable.
Not applicable.
Not applicable.
Defatting to the skin.
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 base oil and additives. Thickening agent.

| Ingredient name | CAS number | $\%$ |
| :--- | :--- | :--- |
| Residual oils (petroleum), solvent-dewaxed | $64742-62-7$ | $\geq 50-\leq 75$ |
| Graphite | $7782-42-5$ | $\leq 3$ |
| Phosphoric acid esters, amine salt | Proprietary | $\leq 3$ |

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

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| :--- | :--- | :--- | ---: | :--- |
| Language ENGLISH |  |  |  |

## Section 3. Composition/information on ingredients

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

$\left.\begin{array}{ll}\text { Eye contact } & \begin{array}{l}\text { In case of contact, immediately flush eyes with plenty of water for at least } 15 \text { minutes. } \\ \text { Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and } \\ \text { remove any contact lenses. Get medical attention. }\end{array} \\ \text { Skin contact } & \begin{array}{l}\text { Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove } \\ \text { contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly } \\ \text { before reuse. Get medical attention if symptoms occur. } \\ \text { If inhaled, remove to fresh air. Get medical attention if symptoms occur. } \\ \text { Do not induce vomiting unless directed to do so by medical personnel. Get medical } \\ \text { attention if symptoms occur. } \\ \text { No action shall be taken involving any personal risk or without suitable training. }\end{array} \\ \text { Inhalation } & \\ \text { Ingestion } & \\ \text { Protection of first-aiders } & \\ \text { Most important symptoms/effects, acute and delayed }\end{array}\right\}$

## Section 5. Fire-fighting measures

## Extinguishing media

 Suitable extinguishing mediaUnsuitable extinguishing media

Specific hazards arising from the chemical
Hazardous combustion products

Special protective actions for fire-fighters Special protective equipment for fire-fighters

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.
Do not use water jet.

In a fire or if heated, a pressure increase will occur and the container may burst.
Combustion products may include the following:
metal oxide/oxides
carbon oxides ( $\mathrm{CO}, \mathrm{CO}_{2}$ ) (carbon monoxide, carbon dioxide)
sulfur oxides ( $\mathrm{SO}, \mathrm{SO}_{2}$ etc.)

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.
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 $\quad$| For non-emergency |
| :--- |
| personnel |
| For 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. |
| 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". |

## Section 7. Handling and storage

## Precautions for safe handling

Protective measures
Advice on general occupational hygiene

Conditions for safe storage, including any
incompatibilities

Put on appropriate personal protective equipment (see Section 8).
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.

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 |
| :--- | :--- |
| Residual oils (petroleum), solvent-dewaxed | ACGIH TLV (United States). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Issued/Revised: |
|  | 11/2099 Form: Inhalable fraction |
|  | OSHA PEL (United States). |
|  | TWA: $5 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Issued/Revised: |
| Graphite | 6/1993 |
|  | ACGIH TLV (United States). |
|  | TWA: $2 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. Issued/Revised: |
|  | 9/1994 Form: Respirable fraction |
|  | OSHA PEL Z3 (United States). |
|  | TWA: 15 mppcf 8 hours. Issued/Revised: |
|  | 9/1997 |

## Section 8. Exposure controls/personal protection

|Phosphoric acid esters, amine salt |None.

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.

## Appropriate engineering

 controls
## Environmental exposure controls

## Individual protection measures

| Hygiene measures | Wash hands, forearms and face thoroughly after handling chemical products, before <br> eating, smoking and using the lavatory and at the end of the working period. <br> Appropriate techniques should be used to remove potentially contaminated clothing. <br> Wash contaminated clothing before reusing. Ensure that eyewash stations and safety <br> showers are close to the workstation location. <br> Eye/face protection <br> Skin protection |
| :--- | :--- |
| Safety glasses with side shields. |  |
| 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. |  |
| Use of protective clothing is good industrial practice. |  |
| Bersonal protective equipment for the body should be selected based on the task being |  |
| protection | 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 |  |

## Section 8. Exposure controls/personal 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 | Grease |
| Color | Brown. [Dark] |
| Odor | Not available. |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point | Not available. |
| Boiling point | Not available. |
| Flash point | Open cup: $228^{\circ} \mathrm{C}\left(442.4^{\circ} \mathrm{F}\right)$ [Cleveland.] |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. Based on - Physical state |
| Lower and upper explosive | Not available. |
| (flammable) limits | Not available. |
| Vapor pressure | Not available. |
| Vapor density | $<1000$ kg $/ \mathrm{m}^{3}\left(<1 \mathrm{~g} / \mathrm{cm}^{3}\right)$ at $15.6^{\circ} \mathrm{C}$ |
| Density | insoluble in water. |
| Solubility | Not available. |
| Partition coefficient: $\mathrm{n}-$ |  |
| octanol/water | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Kinematic: $2200 \mathrm{~mm}^{2} / \mathrm{s}(2200 \mathrm{cSt})$ at $40^{\circ} \mathrm{C}$ |
| Viscosity |  |

## Section 10. Stability and reactivity

Reactivity

Chemical stability The product is stable.

Possibility of hazardous reactions

## Conditions to avoid

Incompatible materials

Hazardous decomposition products

No specific data. not be produced.

No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

Under normal conditions of storage and use, hazardous reactions will not occur.
Under normal conditions of storage and use, hazardous polymerization will not occur.

Reactive or incompatible with the following materials: oxidizing materials.
Under normal conditions of storage and use, hazardous decomposition products should

## Section 11. Toxicological information

Information on toxicological effects
Information on the likely Routes of entry anticipated: Dermal, Inhalation.
routes of exposure

## Potential acute health effects

Eye contact
Skin contact

No known significant effects or critical hazards.
No known significant effects or critical hazards.

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## Section 11. Toxicological information

| Inhalation | Vapor inhalation under ambient conditions is not normally a problem due to low vapor pressure. |  |
| :---: | :---: | :---: |
| Ingestion |  |  |
| Symptoms related to the physical, chemical and toxicological characteristics |  |  |
| Eye contact | No specific data. |  |
| Skin contact | Adverse symptoms irritation dryness cracking | wing: |
| Inhalation | No specific data. |  |
| Ingestion | No specific data. |  |
| Delayed and immediate effects and also chronic effects from short and long term exposure |  |  |
| Short term exposure |  |  |
| Potential immediate effects | Not available. |  |
| Potential delayed effects | Not available. |  |
| Long term exposure |  |  |
| Potential immediate effects | Not available. |  |
| Potential delayed effects | Not available. |  |
| Potential chronic health effects |  |  |
| General | No known significa | azards. |
| Carcinogenicity | No known significa | zards. |
| Mutagenicity | No known significa | zards. |
| Teratogenicity | No known significa | zards. |
| Developmental effects | No known significa | zards. |
| Fertility effects | No known significa | azards. |
| Numerical measures of toxicity |  |  |
| Acute toxicity estimates |  |  |
| Route Oral |  | ATE value 39592.04 mg/kg |

## Section 12. Ecological information

## Toxicity

No testing has been performed by the manufacturer.

## Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential
Not available.

## Mobility in soil

Soil/water partitio coefficient (Koc)
Mobility Non-volatile. Grease. insoluble in water.

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## Section 12. Ecological information

No known significant effects or critical hazards.

## Section 13. Disposal considerations

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 | IATA |
| :--- | :--- | :--- | :--- | :--- |
| UN number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| UN proper <br> shipping name | - | - | - | - |
| Transport <br> hazard class(es) | - | - | - |  |
| Packing group | - | - | No. |  |
| Environmental <br> hazards | No. |  |  |  |
| Additional <br> information | Special provisions <br> Petroleum oil, not <br> regulated in <br> containers less than <br> 3500 gallons. | - | - | No. |

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 All components are active or exempted.
(TSCA 8b)
SARA 302/304
Composition/information on ingredients
No products were found.

## SARA 311/312

Classification Not applicable.
SARA 313

## Section 15. Regulatory information

Form R - Reporting requirements

Supplier notification

## State regulations

Massachusetts

New Jersey
Pennsylvania
California Prop. 65
$\widehat{4}$ WARNING: This product can expose you to chemicals including Methyl isobutyl ketone, Methyl isobutyl ketone and Ethylene oxide, which are known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Trimethyl phosphate, Trimethyl phosphate, Ethyl acrylate, Propylene oxide and 1,4-Dioxane, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

## Other regulations

Australia inventory (AICS)
Canada inventory
China inventory (IECSC)
Japan inventory (ENCS)
Korea inventory (KECI)
Philippines inventory
(PICCS)
Taiwan Chemical
Substances Inventory
(TCSI)
REACH Status

All components are listed or exempted.
All components are listed or exempted.
All components are listed or exempted.
All components are listed or exempted.
All components are listed or exempted.
All components are listed or exempted.
All components are listed or exempted.

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.)



## History

| Date of issue/Date of <br> revision | $10 / 06 / 2020$. |
| :--- | :--- |
| Date of previous issue | $09 / 30 / 2020$. |
| 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 = Intermediate 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 |

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## Section 16. Other information

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, 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

## $\nabla$ 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.

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