

# SAFETY DATA SHEET



Molub-Alloy 860/460-2 ES

## Section 1. Chemical product and company identification

**GHS product identifier** Molub-Alloy 860/460-2 ES  
**Product code** 461168-DE03  
**SDS no.** 461168

### 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 Europa SE  
Industrial Lubricants & Services  
Erkelenzer Straße 20  
D-41179 Mönchengladbach  
Germany

**EMERGENCY TELEPHONE NUMBER** Telefon: +49 (0)800 7235-074  
Carechem: +44 (0) 1235 239 670 (24/7)

## 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.  
**Storage** Not applicable.  
**Disposal** Not applicable.

**Other hazards which do not result in classification** 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.

**Product name** Molub-Alloy 860/460-2 ES

**Product code** 461168-DE03 **Page:** 1/9

**Version** 3 **Date of issue** 11/09/2020.

**Format** Russia  
Russia

**Language** ENGLISH  
(ENGLISH)

## Section 3. Composition/information on ingredients

**Substance/mixture** Mixture

Highly refined mineral oil and additives Thickening agent.

| Ingredient name                                   | %     | CAS number |
|---|-------|------------|
| Lithium azelate (Nonanedioic acid dilithium salt) | ≤3    | 38900-29-7 |
| bismuth(3+) neodecanoate                          | ≤3    | 34364-26-6 |
| (Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine       | <0.25 | 110-25-8   |
| 2,5-bis(octyldithio)-1,3,4-thiadiazole            | ≤0.3  | 13539-13-4 |

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 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

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | If inhaled, remove to fresh air. Get medical attention if symptoms occur.   |
| <b>Ingestion</b>    | Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.  |
| <b>Skin contact</b> | Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.       |
| <b>Eye contact</b>  | 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. |

### 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

|                                   |   |
|-----------------------------------|---|
| <b>Specific treatments</b>        | No specific treatment.  |
| <b>Notes to physician</b>         | Treatment should in general be symptomatic and directed to relieving any effects.<br>Note: High Pressure Applications<br>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, discoloured and extremely painful with extensive subcutaneous necrosis.<br>Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes. |
| <b>Protection of first-aiders</b> | No action shall be taken involving any personal risk or without suitable training.  |

## Section 5. Firefighting measures

### Extinguishing media

|                                       |   |
|---------------------------------------|---|
| <b>Suitable extinguishing media</b>   | In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray. |
| <b>Unsuitable extinguishing media</b> | Do not use water jet.   |

### Specific hazards arising from the chemical

|   |   |
|---|---|
| <b>Hazardous thermal decomposition products</b> | In a fire or if heated, a pressure increase will occur and the container may burst.<br><br>Combustion products may include the following:<br>metal oxide/oxides<br>carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide) |
|---|---|

**Product name** Molub-Alloy 860/460-2 ES

**Product code** 461168-DE03 **Page:** 2/9

**Version** 3 **Date of issue** 11/09/2020.

**Format** Russia

**Language** ENGLISH

Russia

(ENGLISH)

## Section 5. Firefighting measures

|   |   |
|---|---|
| <b>Special protective actions for fire-fighters</b>   | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| <b>Special protective equipment for fire-fighters</b> | 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

|                                    |  |
|------------------------------------|--|
| <b>For non-emergency personnel</b> | 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 spilt material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. |
| <b>For emergency responders</b>    | If specialised 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".  |
| <b>Environmental precautions</b>   | Avoid dispersal of spilt 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 material for containment and cleaning up

|                    |  |
|--------------------|--|
| <b>Small spill</b> | 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.   |
| <b>Large spill</b> | 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 spilt 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

|   |   |
|---|---|
| <b>Protective measures</b>                    | Put on appropriate personal protective equipment (see Section 8).   |
| <b>Advice on general occupational hygiene</b> | 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| <u>Ingredient name</u>   | <u>Exposure limits</u>   |
|--------------------------|--|
| bismuth(3+) neodecanoate | <b>Ministry of Health and Social Development MAC (Russian Federation).</b><br>STEL: 0.5 mg/m <sup>3</sup> 15 minutes. Issued/<br>Revised: 6/2003 Form: Aerosol |

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour 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

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. 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.

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.

**Product name** Molub-Alloy 860/460-2 ES

**Product code** 461168-DE03 **Page:** 4/9

**Version** 3 **Date of issue** 11/09/2020.

**Format** Russia

**Language** ENGLISH

Russia

(ENGLISH)

## Section 8. Exposure controls/personal protection

### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. 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                               | Grease   |
| Colour                                       | Black.   |
| Odour  | Not available.   |
| Odour threshold                              | Not available.   |
| pH   | Not available.   |
| Melting point                                | Not available.   |
| Boiling point                                | Not available.   |
| Flash point                                  | Closed cup: 269°C (516.2°F) [Estimated. Based on Lubricants - Base Oils] |
| Evaporation rate                             | Not available.   |
| Flammability (solid, gas)                    | Not applicable. Based on - Physical state                                |
| Lower and upper explosive (flammable) limits | Not available.   |
| Vapour pressure                              | Not available.   |
| Vapour density                               | Not available.   |
| Relative density                             | Not available.   |
| Density                                      | <1000 kg/m <sup>3</sup> (<1 g/cm <sup>3</sup> ) at 20°C                  |
| Solubility                                   | insoluble in water.  |
| Partition coefficient: n-octanol/water       | Not available.   |
| Auto-ignition temperature                    | Not available.   |
| Decomposition temperature                    | 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 polymerisation will not occur. |
| Conditions to avoid                | No specific data.  |
| Incompatible materials             | Reactive or incompatible with the following materials: oxidising materials.  |
| Hazardous decomposition products   | Under normal conditions of storage and use, hazardous decomposition products should not be produced.   |

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name                                | Result    | Species      | Dose       | Exposure |
|--|-----------|--------------|------------|----------|
| Dilithium azelate<br>(Nonanedioic acid dilithium salt) | LD50 Oral | Rat - Female | >300 mg/kg | -        |

### Information on likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

### Potential acute health effects

#### Eye contact

No known significant effects or critical hazards.

#### Inhalation

Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.

#### Skin contact

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

#### Ingestion

No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

#### Eye contact

No specific data.

#### Inhalation

No specific data.

#### Skin contact

Adverse symptoms may include the following:  
irritation  
dryness  
cracking

#### Ingestion

No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Eye contact

Potential risk of transient stinging or redness if accidental eye contact occurs.

#### Inhalation

Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.

#### Skin contact

Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

#### Ingestion

Ingestion of large quantities may cause nausea and diarrhoea.

### Potential chronic health effects

#### General

No known significant effects or critical hazards.

#### Carcinogenicity

No known significant effects or critical hazards.

#### Mutagenicity

No known significant effects or critical hazards.

#### Teratogenicity

No known significant effects or critical hazards.

#### Developmental effects

No known significant effects or critical hazards.

#### Fertility effects

No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route | ATE value      |
|-------|----------------|
| Oral  | 17079.38 mg/kg |

## Section 12. Ecological information

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

### Persistence and degradability

Expected to be biodegradable.

### Bioaccumulative potential

Not available.

| Product/ingredient name                     | LogP <sub>ow</sub> | BCF | Potential |
|---|--------------------|-----|-----------|
| (Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine | 3.5 to 4.2         | -   | low       |

### Mobility in soil

**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 minimised 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                   | IMDG           | IATA           |
|-----------------------------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -              | -              |
| <b>Transport hazard class(es)</b> | -              | -              |
| <b>Packing group</b>              | -              | -              |
| <b>Environmental hazards</b>      | No.            | No.            |
| <b>Additional information</b>     | -              | -              |

**Special precautions for user** Not available.

**Product name** Molub-Alloy 860/460-2 ES

**Product code** 461168-DE03 **Page:** 7/9

**Version** 3 **Date of issue** 11/09/2020.

**Format** Russia

**Language** ENGLISH

Russia

(ENGLISH)



## Section 15. Regulatory information

### Regulation according to other foreign laws

|  |   |
|--|---|
| <b>REACH Status</b>                                | The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH. |
| <b>United States inventory (TSCA 8b)</b>           | All components are active or exempted.  |
| <b>Australia inventory (AICS)</b>                  | All components are listed or exempted.  |
| <b>Canada inventory</b>                            | All components are listed or exempted.  |
| <b>China inventory (IECSC)</b>                     | All components are listed or exempted.  |
| <b>Japan inventory (ENCS)</b>                      | At least one component is not listed.   |
| <b>Korea inventory (KECI)</b>                      | All components are listed or exempted.  |
| <b>Philippines inventory (PICCS)</b>               | All components are listed or exempted.  |
| <b>Taiwan Chemical Substances Inventory (TCSI)</b> | All components are listed or exempted.  |

## Section 16. Other information

### History

|                                       |   |
|---------------------------------------|---|
| <b>Date of printing</b>               | 11/9/2020   |
| <b>Date of issue/Date of revision</b> | 11/9/2020   |
| <b>Date of previous issue</b>         | 3/31/2020   |
| <b>Version</b>                        | 3   |
| <b>Prepared by</b>                    | Product Stewardship   |
| <b>Key to abbreviations</b>           | ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = Intermediate Bulk Container<br>IMDG = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]<br>UN = United Nations<br>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 |
| <b>References</b>                     | Not available.  |

✔ 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.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use

|                     |                          |                      |             |                 |           |
|---------------------|--------------------------|----------------------|-------------|-----------------|-----------|
| <b>Product name</b> | Molub-Alloy 860/460-2 ES | <b>Product code</b>  | 461168-DE03 | <b>Page:</b>    | 8/9       |
| <b>Version</b>      | 3                        | <b>Date of issue</b> | 11/09/2020. | <b>Format</b>   | Russia    |
|                     |                          |                      |             | <b>Language</b> | ENGLISH   |
|                     |                          |                      |             |                 | (ENGLISH) |



## Section 16. Other information

of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

**Product name** Molub-Alloy 860/460-2 ES

**Product code** 461168-DE03 **Page:** 9/9

**Version** 3 **Date of issue** 11/09/2020.

**Format** Russia

**Language** ENGLISH

Russia

(ENGLISH)