

SAFETY DATA SHEET**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Product name Molub-Alloy OG 936 SF Heavy Spray
UFI: ☒ RPO-70DF-S009-6QFK
Product code 468842-DE34
SDS no. 468842
Product type Aerosol.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Use of lubricants and greases in open systems-Industrial Use of lubricants and greases in open systems-Professional

**Use of the substance/
mixture** Grease (Aerosol.)
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

1.3 Details of the supplier of the safety data sheet

Supplier BP France
Campus Saint Christophe
Bâtiment Galilée 3
10 avenue de l'Entreprise
Cergy Saint Christophe
95863 CERGY PONTOISE
France

Tel: +33 (0)1 34 22 40 00

E-mail address MSDSadvise@bp.com

1.4 Emergency telephone number

**EMERGENCY
TELEPHONE NUMBER** Tél 01 45 42 59 59 : ORFILA
Tél 01 40 05 48 48 - Centre Anti-Poisons de Paris, Hôpital Fernand Widal - 200, Rue de
Faubourg Saint-Denis - 75475 Paris Cedex 10
Tél 04 72 11 69 11 - Centre Antipoison et de Toxicovigilance de LYON, Bâtiment A, 4ème
étage, 162, avenue Lacassagne, 69424 Lyon Cedex 03
Tél 04 91 75 25 25 - Centre Anti-Poisons de Marseille, Hôpital Salvator, 249, Boulevard Sainte-
Marguerite - 13274 Marseille Cedex 9

Tél: 01 30 30 49 99 - Permanence BP France 24/24

France Poison Center

Carechem: +44 (0) 1235 239 670 (24/7)
Tél 01 45 42 59 59 : ORFILA
Tél 01 40 05 48 48 - Centre Anti-Poisons de Paris, Hôpital Fernand Widal - 200, Rue de
Faubourg Saint-Denis - 75475 Paris Cedex 10
Tél 04 72 11 69 11 - Centre Antipoison et de Toxicovigilance de LYON, Bâtiment A, 4ème
étage, 162, avenue Lacassagne, 69424 Lyon Cedex 03
Tél 04 91 75 25 25 - Centre Anti-Poisons de Marseille, Hôpital Salvator, 249, Boulevard Sainte-
Marguerite - 13274 Marseille Cedex 9

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Product definition Mixture

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

☒ Aerosol 1, H222, H229
 STOT SE 3, H336
 Aquatic Chronic 2, H411

See Section 16 for the full text of the H statements declared above.

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SECTION 2: Hazards identification

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

2.2 Label elements

UFI:

ZRP0-70DF-S009-6QFK

Hazard pictograms



Signal word

Danger

Hazard statements

H222, H229 - Extremely flammable aerosol. Pressurised container: may burst if heated.
 H336 - May cause drowsiness or dizziness.
 H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P211 - Do not spray on an open flame or other ignition source.
 P273 - Avoid release to the environment.
 P261 - Avoid breathing dust or mist.
 P251 - Do not pierce or burn, even after use.

Response

P391 - Collect spillage.
 P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

Storage

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane

Supplemental label elements

Contains 5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione and Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts. May produce an allergic reaction. Repeated exposure may cause skin dryness or cracking.

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings

Not applicable.

Tactile warning of danger

Not applicable.

2.3 Other hazards

Results of PBT and vPvB assessment

Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

Defatting to the skin.
 Prolonged or repeated contact may dry skin and cause irritation.
 Solvent "sniffing" (abuse) or intentional overexposure to vapours can produce serious central nervous system effects, including unconsciousness, and possibly death.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Product definition

Mixture

Hydrocarbon solvent and additives. Propellant: Butane/Propane.

Product/ingredient name

Identifiers

%

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

Type

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SECTION 3: Composition/information on ingredients

Butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥25 - ≤50	Flam. Gas 1A, H220 Press. Gas (Comp.), H280	[2]
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	REACH #: 01-2119486291-36 EC: - CAS: -	≥25 - ≤50	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
Graphite	REACH #: 01-2119486977-12 EC: 231-955-3 CAS: 7782-42-5	≤5	Not classified.	[2]
n-hexane	EC: 203-777-6 CAS: 110-54-3 Index: 601-037-00-0	<1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361f STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1] [2]
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	REACH #: 01-2120119820-64 EC: 276-763-0 CAS: 72676-55-2	<1	Skin Sens. 1B, H317 Aquatic Chronic 2, H411	[1]
Benzenesulfonic acid, di-C10-14-alkyl derivs., calcium salts	REACH #: 01-2119978241-36 EC: - CAS: 1471316-72-9	≤0.3	Skin Sens. 1B, H317	[1]

See Section 16 for the full text of the H statements declared above.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

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

SECTION 4: First aid measures**4.1 Description of 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 recognised skin cleanser. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

Inhalation

If inhaled, remove to fresh air. Get medical attention.

If exposure to vapour, mists or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove immediately to fresh air. Keep patient warm and at rest. If any symptoms persist obtain medical advice.

Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Poisoning very unlikely unless deliberate ingestion of large quantities has occurred. Get medical attention immediately.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

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

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SECTION 4: First aid measures

Potential acute health effects

Inhalation	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Ingestion	No known significant effects or critical hazards.
Skin contact	Defatting to the skin. May cause skin dryness and irritation.
Eye contact	No known significant effects or critical hazards.

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

Inhalation	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Ingestion	Unlikely in this form. Ingestion of large quantities may cause nausea and diarrhoea.
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects.
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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use foam or all-purpose dry chemical to extinguish.
Unsuitable extinguishing media	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	Bursting aerosol containers may be propelled from a fire at high speed. Extremely flammable aerosol. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous combustion products	Combustion products may include the following: carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide) sulphur oxides (SO, SO ₂ , etc.)

5.3 Advice for firefighters

Special precautions 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Eliminate all ignition sources. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilt material. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment.
For emergency responders	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".

6.2 Environmental precautions

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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

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SECTION 6: Accidental release measures**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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. 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. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 5 for firefighting measures.
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling**Protective measures**

Put on appropriate personal protective equipment. Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapour or mist. Avoid contact of spilt material and runoff with soil and surface waterways. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Do not spray on a naked flame or any incandescent material. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

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.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Keep away from heat and direct sunlight. Eliminate all ignition sources. Store and use only in equipment/containers designed for use with this product. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)**Recommendations**

See section 1.2 and Exposure scenarios in annex, if applicable.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters**Occupational exposure limits**

No exposure limit value known.

Product/ingredient name	Exposure limit values
Butane	Ministry of Labor (France). TWA: 800 ppm 8 hours. Issued/Revised: 12/1996 TWA: 1900 mg/m ³ 8 hours. Issued/Revised: 12/1996
Graphite	Ministry of Labor (France). TWA: 2 mg/m ³ 8 hours. Issued/Revised: 12/1996 Form: respirable aerosol
n-hexane	Ministry of Labor (France). TWA: 20 ppm 8 hours. Issued/Revised: 12/2007 TWA: 72 mg/m ³ 8 hours. Issued/Revised: 12/2007

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.

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SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived No Effect Level

No DNELs/DMELs available.

Predicted No Effect Concentration

No PNECs available

8.2 Exposure controls

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.

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. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respiratory protective equipment must be checked to ensure it fits correctly each time it is worn. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Provided an air-filtering/air-purifying respirator is suitable, a multiple type of gas filter for organic gases and vapours (boiling point $\leq 65^{\circ}\text{C}$ and $> 65^{\circ}\text{C}$) can be used for vapour. Use filter types A with AX or comparable standard. Provided an air-filtering/air-purifying respirator is suitable, a filter for particulates can be used. Use filter type P or comparable standard. Air-filtering respirators, also called air-purifying respirators, will not be adequate under conditions of oxygen deficiency (i.e. low oxygen concentration), and would not be considered suitable where airborne concentrations of chemicals with a significant hazard are present. In these cases air-supplied breathing apparatus will be required. 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.

Eye/face protection

Safety glasses with side shields.

Skin protection

Hand protection

General Information:

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures).

Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.

Recommended: Nitrile gloves.

Breakthrough time:

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SECTION 8: Exposure controls/personal protection

Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type. Our recommendations on the selection of gloves are as follows:

Continuous contact:

Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained.
If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to.

Short-term / splash protection:

Recommended breakthrough times as above.
It is recognised that for short-term, transient exposures, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Glove Thickness:

For general applications, we recommend gloves with a thickness typically greater than 0.35 mm.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.
Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Skin and body

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.

Refer to standards:

Respiratory protection: EN 529
Gloves: EN 420, EN 374
Eye protection: EN 166
Filtering half-mask: EN 149
Filtering half-mask with valve: EN 405
Half-mask: EN 140 plus filter
Full-face mask: EN 136 plus filter
Particulate filters: EN 143
Gas/combined filters: EN 14387

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.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical propertiesAppearance

Physical state	Aerosol.
Colour	Black. [Dark]
Odour	Solvent.
Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Closed cup: -80°C (-112°F)
Evaporation rate	Not available.
Flammability (solid, gas)	Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Upper/lower flammability or explosive limits	Lower: 1.5% Upper: 9.5%
Vapour pressure	300 to 799.9 kPa (2250 to 6000 mm Hg) [20°C (68°F)]
Vapour density	Not available.
Relative density	Not available.
Density	<1000 kg/m ³ (<1 g/cm ³) at 20°C
Solubility(ies)	insoluble in water.
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

Particle characteristics

Median particle size	Not applicable.
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9.2 Other informationAerosol product

Type of aerosol	Spray
Heat of combustion	20.13 kJ/g

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
10.2 Chemical stability	The product is stable.
10.3 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.
10.4 Conditions to avoid	High temperatures
10.5 Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity estimates**

Not available.

Information on likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects**Inhalation**

Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Ingestion

No known significant effects or critical hazards.

Skin contact

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

Eye contact

No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics**Inhalation**

Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
 nausea or vomiting
 headache
 drowsiness/fatigue
 dizziness/vertigo
 unconsciousness
 Exposure to high concentrations can cause dizziness, lightheadedness, headache, nausea and blurred vision. Higher levels may cause unconsciousness.
 May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.

Ingestion

No specific data.

Skin contact

Adverse symptoms may include the following:
 irritation
 dryness
 cracking

Eye contact

Adverse symptoms may include the following:
 irritation
 redness

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

Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

Ingestion

Unlikely in this form. Ingestion of large quantities may cause nausea and diarrhoea.

Skin contact

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

Eye contact

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

Potential chronic health effects**General**

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

Carcinogenicity

No known significant effects or critical hazards.

Mutagenicity

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.

SECTION 12: Ecological information**12.1 Toxicity****Environmental hazards**

Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Expected to be biodegradable.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil**Soil/water partition coefficient (K_{oc})**

Not available.

Mobility

Volatile. Liquid. insoluble in water.

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SECTION 12: Ecological information**12.5 Results of PBT and vPvB assessment**

Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

12.6 Other adverse effects No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methodsProduct

Methods of disposal Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

Hazardous waste Yes.

European waste catalogue (EWC)

Waste code	Waste designation
16 05 04*	gases in pressure containers (including halons) containing hazardous substances

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Packaging

Methods of disposal Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

Waste code	European waste catalogue (EWC)
15 01 10*	packaging containing residues of or contaminated by hazardous substances

Special precautions This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

References Commission 2014/955/EU
Directive 2008/98/EC

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1950	UN1950	UN1950	UN1950
14.2 UN proper shipping name	AEROSOLS	AEROSOLS, flammable	AEROSOLS	AEROSOLS, flammable
14.3 Transport hazard class(es)	2 	2 	2.1 	2.1 
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	<u>Tunnel code</u> (D)	-	<u>Emergency schedules</u> F-D, S-U	-

14.6 Special precautions for user Not available.

ADR/RID Classification code: 5F

ADN Classification code: 5F

Product name Molub-Alloy OG 936 SF Heavy Spray

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(France)

SECTION 14: Transport information

14.7 Transport in bulk according to IMO instruments

Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other regulations

REACH Status

The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

United States inventory (TSCA 8b)

All components are active or exempted.

Australia inventory (AIC)

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)

All components are listed or exempted.

Japan inventory (CSCL)

At least one component is not listed.

Korea inventory (KECI)

All components are listed or exempted.

Philippines inventory (PICCS)

At least one component is not listed.

Taiwan Chemical Substances Inventory (TCSI)

Not determined.

Aerosol dispensers

3



Extremely flammable

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

EU - Water framework directive - Priority substances

None of the components are listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P3a
E2

SECTION 15: Regulatory information**National regulations****Social Security Code,
Articles L 461-1 to L 461-7**

Sécurité sociale : tableau 36 tableau 84

**Reinforced medical
surveillance**

Applicable.

**15.2 Chemical safety
assessment**

A Chemical Safety Assessment has been carried out for one or more of the substances within this mixture. A Chemical Safety Assessment has not been carried out for the mixture itself.

SECTION 16: Other information**Abbreviations and acronyms**

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
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 CSA = Chemical Safety Assessment
 CSR = Chemical Safety Report
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EINECS = European Inventory of Existing Commercial chemical Substances
 ES = Exposure Scenario
 EUH statement = CLP-specific Hazard statement
 EWC = European Waste Catalogue
 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)
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SADT = Self-Accelerating Decomposition Temperature
 SVHC = Substances of Very High Concern
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TWA = Time weighted average
 UN = United Nations
 UVCB = Complex hydrocarbon substance
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative
 Varies = may contain one or more of the following 64741-88-4 / RRN 01-2119488706-23, 64741-89-5 / RRN 01-2119487067-30, 64741-95-3 / RRN 01-2119487081-40, 64741-96-4 / RRN 01-2119483621-38, 64742-01-4 / RRN 01-2119488707-21, 64742-44-5 / RRN 01-2119985177-24, 64742-45-6, 64742-52-5 / RRN 01-2119467170-45, 64742-53-6 / RRN 01-2119480375-34, 64742-54-7 / RRN 01-2119484627-25, 64742-55-8 / RRN 01-2119487077-29, 64742-56-9 / RRN 01-2119480132-48, 64742-57-0 / RRN 01-2119489287-22, 64742-58-1, 64742-62-7 / RRN 01-2119480472-38, 64742-63-8, 64742-65-0 / RRN 01-2119471299-27, 64742-70-7 / RRN 01-2119487080-42, 72623-85-9 / RRN 01-2119555262-43, 72623-86-0 / RRN 01-2119474878-16, 72623-87-1 / RRN 01-2119474889-13

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Aérosol 1, H222, H229 STOT SE 3, H336 Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method

Product name Molub-Alloy OG 936 SF Heavy Spray**Product code** 468842-DE34**Page:** 12/17**Version** 11 **Date of issue** 8 December 2021**Format** France**Language** ENGLISH**Date of previous issue** 22 March 2021.**(France)**

SECTION 16: Other information

Full text of abbreviated H statements	H220	Extremely flammable gas.
	H225	Highly flammable liquid and vapour.
	H280	Contains gas under pressure; may explode if heated.
	H304	May be fatal if swallowed and enters airways.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H336	May cause drowsiness or dizziness.
	H361f	Suspected of damaging fertility.
	H373	May cause damage to organs through prolonged or repeated exposure.
	H411	Toxic to aquatic life with long lasting effects.
Full text of classifications [CLP/GHS]	EUH066	Repeated exposure may cause skin dryness or cracking.
	Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
	Asp. Tox. 1	ASPIRATION HAZARD - Category 1
	Flam. Gas 1A	FLAMMABLE GASES - Category 1A
	Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
	Press. Gas (Comp.)	GASES UNDER PRESSURE - Compressed gas
	Repr. 2	REPRODUCTIVE TOXICITY - Category 2
	Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
	Skin Sens. 1B	SKIN SENSITISATION - Category 1B
	STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
	STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

History

Date of issue/ Date of revision	08/12/2021.
Date of previous issue	22/03/2021.
Prepared by	Product Stewardship

 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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Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mixture
Code	468842-DE34
Product name	Molub-Alloy OG 936 SF Heavy Spray

Section 1: Title

Short title of the exposure scenario	Use of lubricants and greases in open systems - Industrial
List of use descriptors	Identified use name: Use of lubricants and greases in open systems-Industrial Process Category: PROC01, PROC02, PROC07, PROC08b, PROC09, PROC10, PROC13 Sector of end use: SU03 Subsequent service life relevant for that use: No. Environmental Release Category: ERC04 Specific Environmental Release Category: ATIEL-ATC SPERC 4.Ci.v1

Processes and activities covered by the exposure scenario	Covers use of lubricants and greases in open systems, including application of lubricant to work pieces or equipment by dipping, brushing or spraying (without exposure to heat), e.g. mould releases, corrosion protection, slideways. Includes associated product storage, material transfers, sampling and maintenance activities.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

No exposure scenario is presented because the product is not classified for Human Health

Contributing scenarios: Operational conditions and risk management measures

Section 2.2: Control of environmental exposure

Product characteristics:	Applicability domain: product in which the risk determining substance has the following hazard profile: LogKow: Vapour pressure: PNEC Freshwater aquatic range (mg/L):
Amounts used:	
EU tonnage of risk determining substance per year:	3.81+01 Tonnes/year
Frequency and duration of use:	
Emission days	300
Environment factors not influenced by risk management:	
Local freshwater dilution factor	10
Local marine water dilution factor	100
Other conditions affecting environmental exposure:	Negligible wastewater emissions as process operates without water contact.
Release fraction to air (after typical onsite RMMs)	5.00E-05

Molub-Alloy OG 936 SF Heavy Spray

Use of lubricants and greases in open systems - Industrial

Release fraction to soil from process (after typical onsite RMMs)	0
Release fraction to wastewater from process (after typical onsite RMMs and before sewage treatment plan)	No data available yet
Technical conditions and measures at process level (source) to prevent release:	Common practices vary across sites thus conservative process release estimates used.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:	Prevent discharge of undissolved substance to or recover from onsite wastewater. User sites are assumed to be provided with oil/water separators and waste water to be discharged via a sewage treatment plant
Organisational measures to prevent/limit release from site:	Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.
Conditions and measures related to sewage treatment plant:	
Estimated substance removal from wastewater via on-site sewage treatment	No data available yet
Assumed domestic sewage treatment plant flow rate (m3/d)	2.00E+3
Maximum allowable site tonnage (M_{Safe}) based on release following total wastewater treatment removal as product:	No data available yet
Conditions and measures related to external treatment of waste for disposal:	External treatment and disposal of waste should comply with applicable local and/or national regulations.
Conditions and measures related to external recovery of waste:	External recovery and recycling of waste should comply with applicable local and/or national regulations.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment	
Exposure assessment (environment):	Used ECETOC TRA model (May 2010 release).
Exposure estimation and reference to its source - Workers	
Exposure assessment (human):	No exposure scenario is presented because the product is not classified for Human Health

Section 4: Guidance to check compliance with the exposure scenario

Environment	Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see www.ATIEL.org/REACH_GES
Health	Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition	Mixture
Code	468842-DE34
Product name	Molub-Alloy OG 936 SF Heavy Spray

Section 1: Title

Short title of the exposure scenario	Use of lubricants and greases in open systems - Professional
List of use descriptors	Identified use name: Use of lubricants and greases in open systems-Professional Process Category: PROC01, PROC02, PROC08a, PROC10, PROC11, PROC13 Sector of end use: SU22 Subsequent service life relevant for that use: No. Environmental Release Category: ERC08a, ERC08d Specific Environmental Release Category: ATIEL-ATC SPERC 8.Cp.v1

Processes and activities covered by the exposure scenario	Covers use of lubricants and greases in open systems, including application of lubricant to work pieces or equipment by dipping, brushing or spraying (without exposure to heat), e.g. mould releases, corrosion protection, slideways. Includes associated product storage, material transfers, sampling and maintenance activities.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

No exposure scenario is presented because the product is not classified for Human Health

Contributing scenarios: Operational conditions and risk management measures

Section 2.2: Control of environmental exposure

Product characteristics:	Applicability domain: product in which the risk determining substance has the following hazard profile: LogKow: Vapour pressure: PNEC Freshwater aquatic range (mg/L):
Amounts used:	
EU tonnage of risk determining substance per year:	2.24E+01 Tonnes/year
Frequency and duration of use:	
Emission days	365
Environment factors not influenced by risk management:	
Local freshwater dilution factor	10
Local marine water dilution factor	100
Other conditions affecting environmental exposure:	Negligible wastewater emissions as process operates without water contact.
Release fraction to air (after typical onsite RMMs)	1.00E-04
Release fraction to soil from process (after typical onsite RMMs)	1E-03

Molub-Alloy OG 936 SF Heavy Spray

Use of lubricants and greases in open systems - Professional

Release fraction to wastewater from process (after typical onsite RMMs and before sewage treatment plan)	No data available yet
Technical conditions and measures at process level (source) to prevent release:	Common practices vary across sites thus conservative process release estimates used.
Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:	Prevent discharge of undissolved substance to or recover from onsite wastewater. User sites are assumed to be provided with oil/water separators and waste water to be discharged via a sewage treatment plant
Organisational measures to prevent/limit release from site:	Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.
Conditions and measures related to sewage treatment plant:	
Estimated substance removal from wastewater via on-site sewage treatment	No data available yet
Assumed domestic sewage treatment plant flow rate (m3/d)	2.00E+3
Maximum allowable site tonnage (M_{Safe}) based on release following total wastewater treatment removal as product:	No data available yet
Conditions and measures related to external treatment of waste for disposal:	External treatment and disposal of waste should comply with applicable local and/or national regulations.
Conditions and measures related to external recovery of waste:	External recovery and recycling of waste should comply with applicable local and/or national regulations.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment	
Exposure assessment (environment):	Used ECETOC TRA model (May 2010 release).
Exposure estimation and reference to its source - Workers	
Exposure assessment (human):	No exposure scenario is presented because the product is not classified for Human Health

Section 4: Guidance to check compliance with the exposure scenario

Environment	Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see www.ATIEL.org/REACH_GES
Health	Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.