SAFETY DATA SHEET



Section 1. Identification

Product name Optileb GR 823-1

468607 SDS# Code 468607-DE03

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

Product use Grease for industrial applications.

For specific application advice see appropriate Technical Data Sheet or consult our

company representative.

Supplier BP Lubricants USA Inc.

> 1500 Valley Road Wayne, NJ 07470

Telephone: +1-888-CASTROL

EMERGENCY HEALTH

INFORMATION:

+1-800-447-8735

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

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

Section 2. Hazards identification

OSHA/HCS status This material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200).

Classification of the

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

Hazards not otherwise

classified

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure

constitute a major medical emergency.

See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Section 3. Composition/information on ingredients

Substance/mixture

Mixture

Highly refined mineral oil and additives. Thickening agent.

Ingredient name	%	CAS number
white mineral oil, petroleum	≥25 - ≤50	8042-47-5
white mineral oil, petroleum	≥25 - ≤50	8042-47-5
Zinc oxide	≤10	1314-13-2

Product code 468607-DE03 Page: 1/10 Product name Optileb GR 823-1

Section 3. Composition/information on ingredients

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

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

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.

Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and

remove any contact lenses. Get medical attention.

Skin contact Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove

contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly

before reuse. Get medical attention if symptoms occur.

Inhalation If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Ingestion Do not induce vomiting unless directed to do so by medical personnel. Get medical

attention if symptoms occur.

Protection of first-aidersNo action shall be taken involving any personal risk or without suitable training.

Most important symptoms/effects, acute and delayed

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

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

Notes to physician Treatment should in general be symptomatic and directed to relieving any effects.

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis.

Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

Specific treatments No specific treatment.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

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

Fire water contaminated with this material must be contained and prevented from being

extinguisher or spray.

Unsuitable extinguishing

media

Do not use water jet.

Specific hazards arising from the chemical

discharged to any waterway, sewer or drain.

Hazardous combustion

Combustion products may include the following: metal oxide/oxides

products

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

sulfur oxides (SO, SO₂ etc.)

Special protective actions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Product name Optileb GR 823-1 Product code 468607-DE03 Page: 2/10

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill Move containers from spill area. Vacuum or sweep up material and place in a

designated, labeled waste container. Dispose of via a licensed waste disposal

contractor.

Large spill Move containers from spill area. Approach release from upwind. Prevent entry into

sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. If emergency personnel are unavailable, contain spilled material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill

area with oil absorbent. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid contact of spilled material and runoff with soil and surface waterways.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep away from heat and direct sunlight. 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
white mineral oil, petroleum	ACGIH TLV (United States). TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction OSHA PEL (United States). TWA: 5 mg/m³ 8 hours. Issued/Revised: 6/1993
white mineral oil, petroleum	OSHA PEL (United States). TWA: 5 mg/m³ 8 hours. Issued/Revised: 6/1993 ACGIH TLV (United States). TWA: 5 mg/m³ 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

Product name Optileb GR 823-1 Product code 468607-DE03 Page: 3/10

Section 8. Exposure controls/personal protection

Zinc oxide

OSHA PEL (United States).

TWA: 5 mg/m³ 8 hours. Issued/Revised:

6/1993 Form: Fume

TWA: 5 mg/m³ 8 hours. Issued/Revised: 6/1993 Form: Respirable fraction

TWA: 15 mg/m³ 8 hours. Issued/Revised:

6/1993 Form: Total dust ACGIH TLV (United States).

STEL: 10 mg/m³ 15 minutes. Issued/Revised:

1/2003 Form: Respirable fraction

TWA: 2 mg/m³ 8 hours. Issued/Revised:

1/2003 Form: Respirable fraction

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.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

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

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection Hand protection

Body protection

Safety glasses with side shields.

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

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

Page: 4/10

Product name Optileb GR 823-1 Product code 468607-DE03

Section 8. Exposure controls/personal protection

suits and boots will be required.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection

> For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m3), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter

(for oil mists less than 125 mg/m3).

Where organic vapours are a potential hazard during metalworking operations, a

combination particulate and organic vapour filter may be necessary.

The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 9. Physical and chemical properties

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

Appearance

Physical state Grease Color White. Odor Mild.

Odor threshold Not available. Not applicable. Melting point/freezing point Not available. Boiling point, initial boiling Not available. point, and boiling range

Closed cup: 240°C (464°F) [Estimated. Based on Lubricants - Base Oils] Flash point

Evaporation rate Not available.

Flammability Not applicable. Based on - Physical state

Not applicable.

Lower and upper explosion limit/flammability limit

Vapor pressure Not available.

	Vapor Pressure at 20°C		Vapor pressure at 50°C			
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method

Relative vapor density Not applicable.

<1000 kg/m3 (<1 g/cm3) at 20°C **Density**

Solubility(ies)

Media	Result
₩ater	Not soluble

Partition coefficient: n-

octanol/water

Viscosity

Not applicable.

Auto-ignition temperature Decomposition temperature Not applicable. Not available. Not available.

Particle characteristics

Median particle size Not available.

Product code 468607-DE03 **Product name** Optileb GR 823-1 Page: 5/10 Version 6.01 Date of issue 12/19/2023. Format US Language ENGLISH

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

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

Conditions to avoid No specific data.

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

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

products not be produced.

Section 11. Toxicological information

Information on toxicological effects

Information on the likely Routes of entry anticipated: Dermal, Inhalation, Eyes.

Potential acute health effects

routes of exposure

Eye contactNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data.

Skin contact Adverse symptoms may include the following:

irritation dryness cracking

InhalationNo specific data.IngestionNo specific data.

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

Short term exposure

Potential immediate Not available.

effects

Potential delayed effects Not available.

Long term exposure

Potential immediate Not available.

effects

Potential delayed effects Not available.

Potential chronic health effects

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

Product nameOptileb GR 823-1Product code468607-DE03Page: 6/10

Section 11. Toxicological information

Numerical measures of toxicity
Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

Persistence and degradability

Expected to be biodegradable.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc})

Not available.

coefficient (Koc)
Mobility

Non-volatile. Grease insoluble in water.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

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

Page: 7/10

Language ENGLISH

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	UN3077	UN3077	UN3077
UN proper shipping name	-	Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)	Environmentally hazardous substance, solid, n.o.s Marine pollutant (Zinc oxide)	Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)
Transport hazard class(es)	-	9	9	9

Product name Optileb GR 823-1 Product code 468607-DE03

Version 6.01 Date of issue 12/19/2023. Format US Lang

Section 14. Transport information **Packing group** Ш Ш **Environmental** No. Yes. Yes. Yes. hazards Additional Product classified as This product is not This product is not per the following information regulated as a regulated as a sections of the dangerous good dangerous good Transportation of when transported in when transported in Dangerous Goods sizes of ≤5 L or ≤5 kg, sizes of ≤5 L or ≤5 kg, Regulations: provided the provided the 2.43-2.45 (Class 9), packagings meet the packagings meet the 2.7 (Marine pollutant general provisions of general provisions of 5.0.2.4.1, 5.0.2.6.1.1 mark). 4.1.1.1, 4.1.1.2 and Non-bulk packages of 4.1.1.4 to 4.1.1.8. and 5.0.2.8. this product are not **Emergency** regulated as schedules dangerous goods F-A, S-F when transported by road or rail.

Special precautions for user N

Not available.

Transport in bulk according

Not available.

to IMO instruments

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

	Product name	CAS number	Concentration
Form R - Reporting requirements	Zinc oxide zinc sulfide	1314-13-2 1314-98-3	4.99 - 5 0.95 - 1
Supplier notification	Zinc oxide zinc sulfide	1314-13-2 1314-98-3	4.99 - 5 0.95 - 1

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

State regulations

Massachusetts The following components are listed: OIL MIST, MINERAL; OIL MIST, MINERAL; ZINC

OXIDE FUME

New Jersey The following components are listed: Oil mist, mineral (white mineral oil); ZINC OXIDE;

ZINC compounds

Pennsylvania The following components are listed: ZINC OXIDE; ZINC OXIDE FUME; ZINC

COMPOUNDS

California Prop. 65

▲ WARNING: This product can expose you to Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Other regulations

Product nameOptileb GR 823-1Product code468607-DE03Page: 8/10Version 6.01Date of issue 12/19/2023.Format USLanguage ENGLISH

Section 15. Regulatory information

Australia inventory (AIIC) At least one component is not listed.

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

China inventory (IECSC)

Japan inventory (CSCL)

Korea inventory (KECI)

Philippines inventory

At least one component is not listed.

All components are listed or exempted.

All components are listed or exempted.

At least one component is not listed.

Taiwan Chemical Substances Inventory

(TCSI)

(PICCS)

All components are listed or exempted.

REACH StatusThe company, as identified in Section 1, sells this product in the EU in compliance with

the current requirements of REACH.

Section 16. Other information

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



History

Date of issue/Date of

revision

Date of previous issue

Prepared by

Key to abbreviations

05/23/2022.

Product Stewardship

12/19/2023.

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

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

▼ 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 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

Product name Optileb GR 823-1 Product code 468607-DE03 Page: 9/10

Section 16. Other information

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 nameOptileb GR 823-1Product code468607-DE03Page: 10/10Version 6.01Date of issue 12/19/2023.Format USLanguage ENGLISH