

# SAFETY DATA SHEET



Optigear BM 100

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

**Product identifier** Optigear BM 100  
**SDS #** 450750  
**Code** 450750-US03

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

**Product use** Gear lubricant  
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

**Manufacturer** BP Lubricants USA Inc.  
1500 Valley Road  
Wayne, NJ 07470  
Telephone: +1-888-CASTROL

**Supplier** PAN AMERICAN ENERGY S.L., SUCURSAL  
ARGENTINA AV. LEANDRO N. ALEM 1180  
PISO 11 – C1001AAT  
CIUDAD AUTÓNOMA DE BUENOS AIRES.

### **EMERGENCY HEALTH INFORMATION:**

Consultas Técnicas 0800-888-8088  
TELÉFONO PARA EMERGENCIAS (24 HORAS) CIQUIME: 0800-222-2933  
+1-800-424-9300 (CHEMTREC USA)  
+1-703-527-3887 (CHEMTREC outside the US)

### **EMERGENCY TELEPHONE NUMBER**

## SECTION 2: Hazards identification

**Classification of the substance or mixture** SKIN IRRITATION - Category 3  
SKIN SENSITIZATION - Category 1  
AQUATIC HAZARD (ACUTE) - Category 3  
AQUATIC HAZARD (LONG-TERM) - Category 3

### GHS label elements

#### **Hazard pictograms**



#### **Signal word**

Warning

#### **Hazard statements**

H316 - Causes mild skin irritation.  
H317 - May cause an allergic skin reaction.  
H412 - Harmful to aquatic life with long lasting effects.

### Precautionary statements

#### **Prevention**

P280 - Wear protective gloves.  
P273 - Avoid release to the environment.  
P261 - Avoid breathing vapor.  
P272 - Contaminated work clothing should not be allowed out of the workplace.

#### **Response**

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P333 + P313 - If skin irritation or rash occurs: Get medical attention.  
P362 + P364 - Take off contaminated clothing and wash it before reuse.

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## SECTION 2: Hazards identification

### Storage

Not applicable.

### Disposal

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

### Other hazards which do not result in classification

None known.

## SECTION 3: Composition/information on ingredients

### Substance/mixture

Mixture

Highly refined mineral oil and additives.

### Other means of identification

Not available.

| Ingredient name   | %         | CAS number      |
|---|-----------|-----------------|
| Distillates (petroleum), hydrotreated heavy paraffinic                                | ≥75 - ≤90 | CAS: 64742-54-7 |
| Distillates (petroleum), hydrotreated heavy paraffinic                                | ≥10 - ≤25 | CAS: 64742-54-7 |
| 2-ethylhexyl 3-octyloxiran-2-octanoate  | ≤3        | CAS: 141-38-8   |
| Residual oils (petroleum), solvent-dewaxed  | ≤3        | CAS: 64742-62-7 |
| Zinc dialkyl dithiophosphate  | ≤2.4      | CAS: 68457-79-4 |
| Sulfonic acids, petroleum, magnesium salts  | ≤3        | CAS: 61789-87-5 |
| Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine (1:5-1:3) | ≤1.9      | -               |
| maleic anhydride  | ≤0.1      | CAS: 108-31-6   |

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

#### 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

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. In the event of any complaints or symptoms, avoid further exposure. Get medical attention. If skin irritation or rash occurs: Get medical advice/attention.

#### Inhalation

If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.

#### Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention if adverse health effects persist or are severe.

#### Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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## SECTION 4: First aid measures

### Most important symptoms/effects, acute and delayed

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

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

|                     |   |
|---------------------|---|
| Notes to physician  | Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Specific treatments | No specific treatment.  |

## SECTION 5: Firefighting measures

### Extinguishing media

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

### Specific hazards arising from the chemical

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects.

### Hazardous thermal decomposition products

Combustion products may include the following:  
metal oxide/oxides  
carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide)  
nitrogen oxides (NO, NO<sub>2</sub> etc.)

### Special protective actions for fire-fighters

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

### Special protective equipment for fire-fighters

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

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                             |  |
|-----------------------------|--|
| For non-emergency personnel | Contact 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. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. |
| For emergency responders    | Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. 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

|               |                 |              |             |          |           |
|---------------|-----------------|--------------|-------------|----------|-----------|
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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. Dispose of via a licensed waste disposal contractor.   |
| Large spill | Stop leak if without risk. Move containers from spill area. Approach 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. Contaminated absorbent material may pose the same hazard as the spilled product. 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. 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. Contaminated work clothing should not be allowed out of the workplace. See also Section 8 for additional information on hygiene measures.  |
| Conditions for safe storage, including any incompatibilities | Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.               |

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name  | Exposure limits  |
|--|--|
| Distillates (petroleum), hydrotreated heavy paraffinic | <b>Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina) [Aceite mineral]</b><br>TWA 8 hours: 5 mg/m³. Form: mist. Issued/Revised: 11/2003.<br>STEL 15 minutes: 10 mg/m³. Form: mist. Issued/Revised: 11/2003. |
| Distillates (petroleum), hydrotreated heavy paraffinic | <b>Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina) [Aceite mineral]</b><br>TWA 8 hours: 5 mg/m³. Form: mist. Issued/Revised: 11/2003.<br>STEL 15 minutes: 10 mg/m³. Form: mist. Issued/Revised: 11/2003. |
| Residual oils (petroleum), solvent-dewaxed             | <b>Ministry of Labor, Employment and Social Security. Argentina (Resolution</b>  |

## SECTION 8: Exposure controls/personal protection

maleic anhydride

**295,11/2003) (Argentina) [Aceite mineral]**  
TWA 8 hours: 5 mg/m<sup>3</sup>. Form: mist. Issued/  
Revised: 11/2003.  
STEL 15 minutes: 10 mg/m<sup>3</sup>. Form: mist.  
Issued/Revised: 11/2003.  
**Ministry of Labor, Employment and  
Social Security. Argentina (Resolution  
295,11/2003) (Argentina) A4. Sensitizer.**  
TWA 8 hours: 0.1 ppm. Issued/Revised:  
11/2003.

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. Contaminated work clothing should not be allowed out of the workplace. 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.

SECTION 8: Exposure controls/personal protection

**Body protection** Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

**Other skin protection** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment. For protection against metal working fluids, respiratory protection that is classified as “resistant to oil” (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m3), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m3). Where organic vapours are a potential hazard during metalworking operations, a combination particulate and organic vapour filter may be necessary. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

SECTION 9: Physical and chemical properties

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

Appearance

**Physical state** Liquid.

**Color** Brown.

**Odor** Not available.

**Odor threshold** Not available.

**pH** Not applicable.

**Melting point/freezing point** Not available.

**Boiling point or initial boiling point and boiling range** Not available.

**Flash point** Open cup: >200°C (>392°F) [Cleveland]

**Pour point** -21 °C

**Evaporation rate** Not available.

**Flammability** Not available.

**Lower and upper explosion limit/flammability limit** Not available.

**Vapor pressure**

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



SECTION 9: Physical and chemical properties

|  |          |           |             |         |          |        |
|--|----------|-----------|-------------|---------|----------|--------|
| Distillates (petroleum), hydrotreated heavy paraffinic | <0.07501 | <0.01     | ASTM D 5191 |         |          |        |
| Distillates (petroleum), hydrotreated heavy paraffinic | <0.07501 | <0.01     | ASTM D 5191 |         |          |        |
| Residual oils (petroleum), solvent-dewaxed             | <0.07501 | <0.01     | ASTM D 5191 |         |          |        |
| Zinc dialkyl dithiophosphate                           | 0.000019 | 0.0000025 | EU A.4      | 0.00017 | 0.000023 | EU A.4 |

Relative vapor density  
Density  
Solubility(ies)

Not available.  
<1000 kg/m³ (<1 g/cm³) at 15°C


| Media | Result      |
|-------|-------------|
| water | Not soluble |

Partition coefficient: n-octanol/water  
Auto-ignition temperature  
Decomposition temperature  
Viscosity  
VOC  
Particle characteristics  
Median particle size

Not applicable.  
Not available.  
Not available.  
Kinematic: 100 mm²/s (100 cSt) at 40°C  
Kinematic: 6.8 mm²/s (6.8 cSt) at 100°C  
3.5 g/l  
Not applicable.

SECTION 10: Stability and reactivity

Reactivity  
Chemical stability  
Possibility of hazardous reactions  
Conditions to avoid  
Incompatible materials  
Hazardous decomposition products

No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.  
The product is stable.  
Under normal conditions of storage and use, hazardous reactions will not occur.  
Under normal conditions of storage and use, hazardous polymerization will not occur.  
No specific data.  
Reactive or incompatible with the following materials: oxidizing materials.  
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 |
|-------------------------|--------|
|-------------------------|--------|

## SECTION 11: Toxicological information

Distillates (petroleum), hydrotreated heavy paraffinic

### Rat - Oral - LD50

>5000 mg/kg

OECD 401

### Rabbit - Dermal - LD50

>5000 mg/kg

OECD 402

### Rat - Inhalation - LC50 Dusts and mists

>5 mg/l [4 hours]

OECD 403

Distillates (petroleum), hydrotreated heavy paraffinic

### Rat - Oral - LD50

>5000 mg/kg

OECD 401

### Rabbit - Dermal - LD50

>5000 mg/kg

OECD 402

### Rat - Inhalation - LC50 Dusts and mists

>5 mg/l [4 hours]

OECD 403

Zinc dialkyl dithiophosphate

### Rat - Oral - LD50

3600 mg/kg

OECD 401

### Rat - Dermal - LD50

>20000 mg/kg

OECD 402

Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine (1:5-1:3)

### Rat - Oral - LD50

>2000 mg/kg

OECD 401

### Rat - Dermal - LD50

>2000 mg/kg

OECD 402

maleic anhydride

### Rat - Oral - LD50

1090 mg/kg

OECD 401

### Rabbit - Dermal - LD50

2620 mg/kg

DIN

### Skin corrosion/irritation

#### Product/ingredient name

Distillates (petroleum), hydrotreated heavy paraffinic

Distillates (petroleum), hydrotreated heavy paraffinic

Zinc dialkyl dithiophosphate

Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine (1:5-1:3)

maleic anhydride

#### Result

##### Rabbit - Skin - Mild irritant

OECD 404

##### Rabbit - Skin - Mild irritant

OECD 404

##### Rabbit - Skin - Irritant

OECD 404

##### Rabbit - Skin - Moderate irritant

OECD 404

##### Rabbit - Skin - Corrosive

OECD 404

### Serious eye damage/eye irritation

#### Product/ingredient name

#### Result

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## SECTION 11: Toxicological information

Distillates (petroleum), hydrotreated heavy paraffinic  
Distillates (petroleum), hydrotreated heavy paraffinic  
Zinc dialkyl dithiophosphate

Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine (1:5-1:3)  
maleic anhydride

**Rabbit - Eyes - Non-irritating to the eyes.**  
OECD 405  
**Rabbit - Eyes - Non-irritating to the eyes.**  
OECD 405  
**Rabbit - Eyes - Severe irritant**  
OECD 405  
**Rabbit - Eyes - Redness of the conjunctivae**  
OECD 405  
Irritation score: ≥2  
**Rabbit - Eyes - Corrosive**  
OECD 405

### Respiratory corrosion/irritation

Not available.

### Respiratory or skin sensitization

#### **Product/ingredient name**

Distillates (petroleum), hydrotreated heavy paraffinic

Distillates (petroleum), hydrotreated heavy paraffinic

Zinc dialkyl dithiophosphate

Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine (1:5-1:3)  
maleic anhydride

#### **Result**

**Guinea pig - skin**  
OECD 406  
Result: Not sensitizing  
**Guinea pig - skin**  
OECD 406  
Result: Not sensitizing  
**Guinea pig - skin**  
OECD 406  
Result: Not sensitizing  
**Guinea pig - skin**  
OECD 406  
Result: Sensitizing  
**Mouse - skin**  
Result: Sensitizing  
**Rat - Respiratory**  
Result: Sensitizing

### Germ cell mutagenicity

#### **Product/ingredient name**

Distillates (petroleum), hydrotreated heavy paraffinic

Distillates (petroleum), hydrotreated heavy paraffinic

#### **Result**

**In vitro - Bacteria**  
Bacterial Reverse Mutation Test  
Result: Negative  
**In vitro - Mammal - species unspecified**  
In vitro Mammalian Chromosomal Aberration Test  
Result: Negative  
**In vivo - Mammal - species unspecified**  
Mammalian Erythrocyte Micronucleus Test  
Result: Negative  
**In vitro - Mammal - species unspecified**  
In vitro Mammalian Cell Gene Mutation Test  
Result: Negative  
**In vitro - Bacteria**  
Bacterial Reverse Mutation Test  
Result: Negative  
**In vitro - Mammal - species unspecified**

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SECTION 11: Toxicological information

Zinc dialkyl dithiophosphate

In vitro Mammalian Chromosomal Aberration Test  
Result: Negative  
**In vivo - Mammal - species unspecified**  
Mammalian Erythrocyte Micronucleus Test  
Result: Negative  
**In vitro - Mammal - species unspecified**  
In vitro Mammalian Cell Gene Mutation Test  
Result: Negative  
**In vitro - Bacteria**  
Bacterial Reverse Mutation Test  
Result: Negative  
**In vitro - Mammal - species unspecified**  
In vitro Mammalian Cell Gene Mutation Test  
Result: Negative  
**In vivo - Mammal - species unspecified**  
Mammalian Erythrocyte Micronucleus Test  
Result: Negative  
**In vitro - Bacteria**  
OECD 471  
Result: Negative  
**In vitro - Mammalian-Animal**  
OECD 476  
Result: Negative  
**In vivo - Mammalian-Animal**  
OECD 475  
Result: Negative

maleic anhydride

Carcinogenicity

Product/ingredient name

Distillates (petroleum), hydrotreated heavy paraffinic

Distillates (petroleum), hydrotreated heavy paraffinic

Result

**Mouse - Dermal - Unspecified**  
OECD 451  
Result: Negative  
**Mouse - Dermal - Unspecified**  
OECD 451  
Result: Negative

Reproductive toxicity

Product/ingredient name

Distillates (petroleum), hydrotreated heavy paraffinic

Distillates (petroleum), hydrotreated heavy paraffinic

Zinc dialkyl dithiophosphate

Result

**Rat - Oral**  
OECD 421  
Maternal toxicity: Negative  
Fertility effects: Negative  
Developmental: Negative  
**Rat - Oral**  
OECD 421  
Maternal toxicity: Negative  
Fertility effects: Negative  
Developmental: Negative  
**Rat - Oral**  
OECD 422  
Maternal toxicity: Positive  
Fertility effects: Negative  
Developmental: Negative

## SECTION 11: Toxicological information

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

#### Product/ingredient name

maleic anhydride

#### Result

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system) (inhalation) - Category 1

### Aspiration hazard

#### Product/ingredient name

Distillates (petroleum), hydrotreated heavy paraffinic

#### Result

ASPIRATION HAZARD - Category 1

### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

### Potential acute health effects

#### Eye contact

No known significant effects or critical hazards.

#### Skin contact

Causes mild skin irritation. Defatting to the skin. May cause an allergic skin reaction.

#### Inhalation

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

#### Ingestion

Irritating to mouth, throat and stomach.

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

#### Eye contact

Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

#### Skin contact

Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking

#### Inhalation

No specific data.

#### Ingestion

No specific data.

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

#### Short term exposure

##### Potential immediate effects

Not available.

##### Potential delayed effects

Not available.

#### Long term exposure

##### Potential immediate effects

Not available.

##### Potential delayed effects

Not available.

### Potential chronic health effects

#### General

No known significant effects or critical hazards.

#### Carcinogenicity

No known significant effects or critical hazards.

#### Mutagenicity

No known significant effects or critical hazards.

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SECTION 11: Toxicological information

|                       |   |
|-----------------------|---|
| 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  | 178279.54 mg/kg |

SECTION 12: Ecological information

Toxicity

Product/ingredient name

Distillates (petroleum), hydrotreated heavy paraffinic

Result

**Acute - EL50**  
OECD 201  
Algae  
>100 mg/l [72 hours]  
**Acute - EL50**  
OECD 202  
Daphnia  
>10000 mg/l [48 hours]  
**Acute - LL50**  
OECD 203  
Fish  
>100 mg/l [96 hours]  
**Chronic - NOEL**  
OECD 201  
Algae  
≥100 mg/l [72 hours]  
**Chronic - NOEL**  
OECD 211  
Daphnia  
10 mg/l [21 days]  
**Acute - EL50**  
OECD 201  
Algae  
>100 mg/l [72 hours]  
**Acute - EL50**  
OECD 202  
Daphnia  
>10000 mg/l [48 hours]  
**Acute - LL50**  
OECD 203  
Fish  
>100 mg/l [96 hours]  
**Chronic - NOEL**  
OECD 201  
Algae  
≥100 mg/l [72 hours]  
**Chronic - NOEL**  
OECD 211  
Daphnia  
10 mg/l [21 days]  
**Acute - ErL50**  
OECD 201  
Algae

Distillates (petroleum), hydrotreated heavy paraffinic

Zinc dialkyl dithiophosphate

SECTION 12: Ecological information

|   |                        |
|---|------------------------|
|   | 24 mg/l [72 hours]     |
|   | <b>Acute - EL50</b>    |
|   | OECD 202               |
|   | Daphnia                |
|   | 23 mg/l [48 hours]     |
|   | <b>Acute - LL50</b>    |
|   | OECD 203               |
|   | Fish                   |
|   | 4.5 mg/l [96 hours]    |
|   | <b>Chronic - NOELR</b> |
|   | OECD 201               |
|   | Algae                  |
|   | 10 mg/l [72 hours]     |
| Reaction product of ammonium molybdate and C12-C24-diethoxylated alkylamine (1:5-1:3) | <b>Chronic - EC50</b>  |
| maleic anhydride  | Daphnia                |
|   | 6.8 mg/l [48 hours]    |
|   | <b>Acute - EC50</b>    |
|   | OECD 201               |
|   | Algae                  |
|   | 65.78 mg/l [72 hours]  |
|   | <b>Acute - EC50</b>    |
|   | OECD 202               |
|   | Daphnia                |
|   | 37.9 mg/l [48 hours]   |
|   | <b>Acute - LC50</b>    |
|   | OECD 203               |
|   | Fish                   |
|   | 75 mg/l [72 hours]     |
|   | <b>Chronic - EC10</b>  |
|   | OECD 201               |
|   | Algae                  |
|   | 10.4 mg/l [72 hours]   |

Environmental effects

This material is harmful to aquatic life with long lasting effects.

Persistence and degradability

Not expected to be rapidly degradable.

Product/ingredient name

Distillates (petroleum), hydrotreated heavy paraffinic  
Distillates (petroleum), hydrotreated heavy paraffinic  
Zinc dialkyl dithiophosphate  
  
maleic anhydride

Result

OECD 301F  
31% [28 days] - Not readily  
OECD 301F  
31% [28 days] - Not readily  
OECD 301B  
1.5% [28 days] - Not readily  
OECD 301B  
>90% [25 days]

Bioaccumulative potential

Not available.

Mobility in soil

Soil/Water partition coefficient

Not available.

## SECTION 12: Ecological information

### Mobility

Non-volatile. Liquid. 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

|                            | ADR/RID        | ADN            | IMDG           | IATA/ICAO      |
|----------------------------|----------------|----------------|----------------|----------------|
| UN number                  | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name    | -              | -              | -              | -              |
| Transport hazard class(es) | -              | -              | -              | -              |
| Packing group              | -              | -              | -              | -              |
| Environmental hazards      | No.            | No.            | No.            | No.            |
| Additional information     | -              | -              | -              | -              |

### Special precautions for user

Not available.

### Transport in bulk according to IMO instruments

Not available.

## SECTION 15: Regulatory information

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

**Product name** Optigear BM 100

**Product code** 450750-US03

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**Version** 8.01

(AR)

(ENGLISH)

SECTION 15: Regulatory information

Not listed.

[UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

[Other regulations](#)

|   |   |
|---|---|
| <a href="#">Australia inventory (AIRC)</a>                  | All components are listed or exempted.  |
| <a href="#">Canada inventory</a>                            | At least one component is not listed in DSL but all such components are listed in NDSL.               |
| <a href="#">China inventory (IECSC)</a>                     | All components are listed or exempted.  |
| <a href="#">Japan inventory (CSCL)</a>                      | At least one component is not listed.   |
| <a href="#">Korea inventory (KECI)</a>                      | At least one component is not listed.   |
| <a href="#">Philippines inventory (PICCS)</a>               | At least one component is not listed.   |
| <a href="#">Taiwan Chemical Substances Inventory (TCSI)</a> | All components are listed or exempted.  |
| <a href="#">United States inventory (TSCA 8b)</a>           | All components are active or exempted.  |
| <a href="#">REACH Status</a>                                | For the REACH status of this product please consult your company contact, as identified in Section 1. |

SECTION 16: Other information

[History](#)

|  |  |
|--|--|
| <a href="#">Date of issue/Date of revision</a> | 11/07/2025.  |
| <a href="#">Date of previous issue</a>         | 04/17/2024.  |
| <a href="#">Prepared by</a>                    | Product Stewardship  |
| <a href="#">Key to abbreviations</a>           | ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway<br>ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road<br>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>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>UN = United Nations<br>VOC = Volatile Organic Compound<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 |

 Indicates information that has changed from previously issued version.

[Notice to reader](#)



## **SECTION 16: Other information**

*All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.*

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