

SAFETY DATA SHEET



Optitemp LG 2

Section 1. Product and company identification

GHS product identifier Optitemp LG 2

SDS # 466384

Product code 466384-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.

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Section 2. Hazards identification

Classification of the substance or mixture AQUATIC HAZARD (ACUTE) - Category 3

GHS label elements

Signal word No signal word.

Hazard statements H402 - Harmful to aquatic life.

Precautionary statements

Prevention P273 - Avoid release to the environment.

Response Not applicable.

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 Defatting to the skin.
Note: High Pressure Applications
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency.
See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

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Section 3. Composition/information on ingredients

Substance/mixture Mixture
Synthetic lubricant and additives. Thickening agent.

Ingredient name	%	CAS number
Fatty acids, tall-oil, lithium salts	≤3	502962-81-4
Amines, C12-14-alkyl, C6-10-alkyl phosphates	<1	68603-55-4
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	≤0.3	68411-46-1
(Z)-N-9-octadecenylpropane-1,3-diamine	≤0.068	7173-62-8

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.

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

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.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

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

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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 extinguisher or spray.
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. This material is harmful to aquatic life.

Hazardous thermal decomposition products

Combustion products may include the following:
metal oxide/oxides
carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)

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. Provide adequate ventilation. 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.
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

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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. 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.

Not suitable

Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Recommended monitoring procedures

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

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

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Section 8. Exposure controls/personal protection

Hygiene measures

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

Eye/face protection

Safety glasses with side shields.

Skin protection

Hand protection

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

Skin 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.

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

Grease

Color

Beige. [Light]

Odor

Not available.

Odor threshold

Not available.

pH

Not applicable.

Melting point/freezing point

Not available.

Boiling point, initial boiling point, and boiling range

Not available.

Flash point

Closed cup: 220°C (428°F) [Estimated. Based on Lubricants - Base Oils]

Burning time

Not available.

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Section 9. Physical and chemical properties

Burning rate	Not available.
Evaporation rate	Not available.
Flammability	Not applicable. Based on - Physical state
Lower and upper explosion limit/flammability limit	Not applicable.
Vapor pressure	0.00022 kPa (0.0016561 mm Hg)
Relative vapor density	Not applicable.
Relative density	Not available.
Density	<1000 kg/m ³ (<1 g/cm ³) at 20°C
Solubility(ies)	

Media	Result
water	Not soluble

Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
SADT	Not available.
Particle characteristics	
Median particle size	Not available.

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Specific target organ toxicity (repeated exposure)

Name	Category	Target organs
(Z)-N-9-octadecenylpropane-1,3-diamine	Category 1	-

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

Potential acute health effects

Eye contact No known significant effects or critical hazards.

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Section 11. Toxicological information

Inhalation	No known significant effects or critical hazards.
Skin contact	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Ingestion	No specific data.

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

Eye contact	Potential risk of transient stinging or redness if accidental eye contact occurs.
Inhalation	Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Ingestion	Ingestion of large quantities may cause nausea and diarrhea.

Potential chronic health effects

General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	203927.53 mg/kg

Section 12. Ecological information

Toxicity

No testing has been performed by the manufacturer.

Persistence/degradability

No testing has been performed by the manufacturer.

Bioaccumulative potential

No testing has been performed by the manufacturer.

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Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	5.1	-	high
(Z)-N-9-octadecenylpropane-1,3-diamine	0.03	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc})

Not available.

Mobility

Grease. insoluble in water.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or 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

	Brazil (ANTT)	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user Not available.

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Section 15. Regulatory information

This safety data sheet was prepared in accordance with the Brazilian Standard (ABNT NBR 14725-4:2014)

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

Safety, health and environmental regulations specific for the product

No known specific national and/or regional regulations applicable to this product (including its ingredients).

Regulation according to other foreign laws

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.

REACH Status

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

Japan inventory (CSCL)

All components are listed or exempted.

Korea inventory (KECI)

All components are listed or exempted.

Philippines inventory (PICCS)

At least one component is not listed.

Taiwan Chemical Substances Inventory (TCSI)

All components are listed or exempted.

United States inventory (TSCA 8b)

All components are active or exempted.

Section 16. Other information

History

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Prepared by Product Stewardship

Key to abbreviations

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

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)

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]

SADT = Self-Accelerating Decomposition Temperature

UN = United Nations

Varies = may contain one or more of the following 64741-88-4, 64741-89-5,

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Section 16. Other information

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.

The data and advice given apply when the product is sold and applied for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

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. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

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