

SAFETY DATA SHEET

LUBENZ FLUX BRAKE
FLUID 3 DOT 3

Section 1. Identification

GHS product identifier **Product type**

LUBENZ FLUX BRAKE FLUID 3 DOT 3

Product code 467148-TH06

SDS no. 467148

Relevant identified uses of the substance or mixture and uses advised against **Product use**

Brake fluids.

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

Supplier

JLT 20th Floor
Fortune Executive Tower Cluster T
Dubai, UAE
www.lubenzlubricants.com

Section 2. Hazards identification

Classification of the substance or mixture

Not classified.

GHS label elements

Signal word

No signal word.

Hazard statements

No known significant effects or critical hazards.

Precautionary statements

General

P103 - Read label before use.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.

Prevention

Not applicable.

Response

Not applicable.

Storage

Not applicable.

Disposal

Not applicable.

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Glycol ethers. Proprietary performance additives.

Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
2-(2-(2-butoxyethoxy)ethoxy)ethanol	≥10 - ≤25	143-22-6
2,2' -oxybisethanol	<10	111-46-6
2-(2-butoxyethoxy)ethanol	≤3	112-34-5
2-(2-methoxyethoxy)ethanol	<3	111-77-3

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 if symptoms occur.

Inhalation Skin contact

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

Ingestion

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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.

Specific treatments

No specific treatment.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media

In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.

Do not use water jet.

Specific hazards arising from the chemical

Hazardous thermal decomposition products

In a fire or if heated, a pressure increase will occur and the container may burst.

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

Special protective actions for fire-fighters

Special protective equipment for fire-fighters

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

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

For non-emergency personnel

emergency procedures

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

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".

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).

Methods and material for containment and cleaning up

Small spill

Large 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. Stop leak if without risk. Move containers from

spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling Protective measures

Advice on general occupational hygiene

Put on appropriate personal protective equipment (see Section 8).

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

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Not suitable

Prolonged exposure to elevated temperature

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure

limits

Ingredient name

2-(2-butoxyethoxy)ethanol

Exposure limits

ACGIH TLV (United States).

TWA: 10 ppm 8 hours. Issued/Revised: 3/2012 Form: Inhalable fraction and vapor



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

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.

Environmental exposure controls

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.

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

Safety glasses with side shields.

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended:

Butyl gloves. Neoprene 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.

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

Section 9. Physical and chemical properties

Appearance Physical state Colour

Odour

Odour threshold pH

Melting point

Liquid.

Yellow.

Not available. Not available. Not available.
Not available.

Boiling point

Not available.

Flash point

Open cup: 144°C (291.2°F) [Cleveland.]

Evaporation rate

Not available.

Flammability (solid, gas)

Not

Lower and upper explosive (flammable) limits

applicable.

Vapour pressure Vapour density Relative density

Based on -

Physical

state Not

available

Density	>1000 kg/m ³ (>1 g/cm ³) at 30°C	Not available. Not available. Not available.
Solubility		Soluble in water.
Partition coefficient: n- octanol/water		Not available.
Auto-ignition temperature		Not available.
Decomposition temperature	Not available.	
Viscosity	Kinematic: 7.143 mm ² /s (7.143 cSt) at 40°C Kinematic: 1.986 mm ² /s (1.986 cSt) at 100°C	

Section 10. Stability and reactivity

Reactivity No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

Chemical stability The product is stable.

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

Conditions to avoid Incompatible materials Avoid excessive heat.

Hazardous decomposition products Reactive or incompatible with the following materials: oxidising materials.

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	Route of exposure	Target organs
2,2'-oxybisethanol	Category 2	Oral	Not determined

Information on likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects Eye contact

Inhalation

No known significant effects or critical hazards.
Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.

Skin contact

No known significant effects or critical hazards.



ingestion **PETROTM OIL**

Diethylene glycol: Ingestion of diethylene glycol can cause metabolic acidosis, kidney damage, central nervous system depression, and convulsions. The estimated human lethal dose is approximately 100 ml (3.4 ounces for an adult).

Symptoms related to the physical, chemical and toxicological

characteristics **Eye contact**

No specific data.

Inhalation

May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.

Skin contact **Ingestion**

No specific data.

No specific data.

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

Eye contact **Inhalation**

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

Skin contact

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

Ingestion

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

Ingestion of large quantities may cause nausea and diarrhoea.

Potential chronic health effects

General Carcinogenicity Mutagenicity

Teratogenicity

May cause damage to organs through prolonged or repeated exposure. (kidney) No known significant effects or critical hazards.

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

Developmental effects

Birth defects and decreased fetal weight have been observed in laboratory animals fed diethylene glycol in large amounts repeatedly during pregnancy.

Fertility effects

No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Environmental effects

No known significant effects or critical hazards.

Persistence/degradability

Expected to be biodegradable.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2-(2-(2-butoxyethoxy)ethoxy) ethanol	-	-	Inherent
2-(2-butoxyethoxy)ethanol	-	-	Readily

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil

Not available.

Soil/water partition coefficient (K_{oc})

Mobility

Spillages may penetrate the soil causing ground water contamination.

Other ecological information

Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled.

Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.



Section 14. Transport information

	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.

Product name Castrol Brake Fluid DOT 3

Product code 467148-TH06 **Page: 7/9**

Version 2.01 **Date of issue** 05/12/2021.

Format Singapore
(Singapore)

Language ENGLISH
(ENGLISH)

Section 14. Transport information

Additional information	-	-	-	-
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Special precautions for user Not available.

Section 15. Regulatory information

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

REACH Status

For the REACH status of this product please consult your company contact, as identified in Section 1.

United States inventory (TSCA 8b)

All components are listed or exempted.

Australia inventory (AICS)

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)

All components are listed or exempted.



Japan inventory (ENCS)

All components are listed or exempted.

Korea Inventory (KECI)

At least one component is not listed.

Philippines inventory (PICCS)

All components are listed or exempted. All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI)

Section 16. Other information

History

2021 May 12

Date of issue/Date of revision

2018 January 02

Date of previous issue Version

2.01

Prepared by

Product Stewardship

Key to abbreviations

ACGIH = American Conference of Industrial Hygienists

CAS Number = Chemical Abstracts Service Registry Number

GHS = Global Harmonised System

IATA = International Air Transport Association, the organisation

IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.

OEL = Occupational Exposure Limit

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

SDS = Safety Data Sheet

STEL = Short term exposure limit

TWA = Time weighted average

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

Section 16. Other information

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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