

Safety Data Sheet



SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Brake and Clutch Fluid DOT 4

Product Use: Brake Fluid
Product Number(s): 510663

Company Identification
Chevron Singapore Pte Ltd
3 Fraser Street #12-28
DUO Tower
Singapore 189352

Transportation Emergency Response
Singapore Civil Defense Force: 995

Health Emergency
Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

Product Information
Product Information: +65-6318-1000
SDS Requests: +65-6318-1000

SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION:

- Acute oral toxicant: Category 4.
- Reproductive toxicant: Category 1B.



Signal Word: Danger

Health Hazards:

- Harmful if swallowed (H302).
- May damage fertility or the unborn child (H360).

PRECAUTIONARY STATEMENTS:

Prevention:

- Obtain special instructions before use (P201).
- Do not handle until all safety precautions have been read and understood (P202).
- Wash thoroughly after handling (P264).
- Do not eat, drink or smoke when using this product (P270).
- Wear protective gloves, protective clothing, eye protection, and face protection (P280).

Response:

- IF SWALLOWED: Call a POISON CENTER, doctor, or physician if you feel unwell (P301+P312).

- Rinse mouth (P330).

Storage:

- Store locked up (P405).

Disposal:

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

HAZARDS OTHERWISE NOT CLASSIFIED: Not applicable.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Triethylene glycol monomethyl ether borate ester	30989-05-0	15 - 50 %weight
Diethylene glycol	111-46-6	0 - 25 %weight
Diethylene glycol monomethyl ether	111-77-3	0 - 20 %weight
Diisopropanolamine	110-97-4	1 - 1.5 %weight
4-[1-(4-hydroxyphenyl)-1-methyl-ethyl]phenol	80-05-7	0.2 - < 0.25 %weight

SECTION 4 FIRST AID MEASURES

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To further remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: If swallowed, get medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

IMMEDIATE HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

Ingestion: May be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled.

DELAYED OR OTHER HEALTH EFFECTS:

Reproduction and Birth Defects: Contains material that may cause adverse reproductive effects if swallowed. Contains material that may cause harm to the unborn child if swallowed based on animal data. See Section 11 for additional information. Risk depends on duration and level of exposure.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne

solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Boron, Nitrogen.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Observe all relevant local and international regulations. Eliminate all sources of ignition in vicinity of spilled material. Keep out unnecessary and unprotected personnel. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions in the Exposure Controls/Personal Protection section.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities as appropriate or required.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures: Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling. Keep out of the reach of children.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment (PPE). If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, refer to PPE information below.

Factors that affect PPE include, but are not limited to: properties of the chemical, other chemicals which may contact the same PPE, physical requirements (fit & sizing, cut/puncture protection, dexterity, thermal protection, etc.), and potential allergic reactions to the PPE material. It is the responsibility of the user to read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances. Refer to appropriate CEN standards.

ENGINEERING CONTROLS:

Use general ventilation, local exhaust ventilation, or a combination of both.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Wear protective equipment to prevent eye contact. Selection of protective

equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted.

Skin Protection: Wear chemical personal protective equipment (PPE) to prevent skin contact. Selection of chemical protective clothing should be performed by an Occupational Hygienist or Safety Professional and be based upon applicable standards (ASTM F739 or EN 374). Using chemical PPE depends upon operations conducted and may include chemical gloves, boots, chemical apron, chemical suit, and complete facial protection. **Refer to PPE manufacturers to obtain breakthrough time information to determine how long PPE can be used before it needs to be replaced.** Unless specific glove manufacturer data indicates otherwise, the below table is based upon available industry data to assist in the glove selection process and is intended to be used as reference only.

Chemical Glove Material	Thickness (mm)	Typical Breakthrough Time (minutes)
Butyl	0.7	120
Neoprene	0.75	30
Nitrile	0.8	30
Nitrile	0.11	5
Polyvinyl Chloride (PVC)	1.1	15
Viton Butyl	0.3	120

Respiratory Protection: Not required for identified conditions of use.

Occupational Exposure Limits: No applicable occupational exposure limits exist for this material or its components. Consult local authorities for appropriate values.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Yellow

Physical State: Liquid

Odor: Faint or Mild

Odor Threshold: Not tested/Not Measured

pH: 7 - 11.5

Vapor Pressure: Not tested/Not Measured

Relative Vapor Density: Not tested/Not Measured

Boiling Point: Not tested/Not Measured

Solubility: Soluble in water.

Freezing Point: Not Applicable

Melting Point: Not tested/Not Measured

Particle Characteristics: Not applicable

Density: 1.058 g/ml - 1.060 g/ml @ 20°C (68°F) (Typical)

Kinematic Viscosity: 1.5 mm²/s - 1.95 mm²/s @ 100°C (212°F)

Coefficient of Therm. Expansion / °F: Not Applicable

Evaporation Rate: Not tested/Not Measured

Partition coefficient n-octanol/water (logarithmic value): Not tested/Not Measured

FLAMMABLE PROPERTIES:

Flashpoint: (Cleveland Open Cup) 108 °C - 134 °C (226 °F - 273 °F) (Typical)

Autoignition: Not tested/Not Measured

Flammability (Explosive) Limits (% by volume in air): Lower: Not Applicable Upper: Not Applicable

SECTION 10 STABILITY AND REACTIVITY

Reactivity: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility With Other Materials: Not applicable

Hazardous Decomposition Products: None known (None expected)

Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Eye Irritation: The material is not considered an eye irritant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Dermal Toxicity: The material is not considered a dermal toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Skin Irritation: The material is not considered a skin irritant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Skin Sensitization: The material is not considered a skin sensitizer. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Oral Toxicity: This material is harmful if swallowed. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Inhalation Toxicity: The material is not considered an inhalation toxicant. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Acute Toxicity Estimate: Not Determined

Germ Cell Mutagenicity: The material is not considered a mutagen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Carcinogenicity: The material is not considered a carcinogen. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Reproductive Toxicity: This material may damage fertility or the unborn child. The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Specific Target Organ Toxicity - Single Exposure: The material is not considered a target organ toxicant (single exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Specific Target Organ Toxicity - Repeated Exposure: The material is not considered a target organ toxicant (repeated exposure). The product has not been tested. The statement is based on evaluation of data for similar materials or product components.

Aspiration Hazard: The material is not considered an aspiration hazard.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

This material is not expected to be harmful to aquatic organisms.

The product has not been tested. The statement has been derived from the properties of the individual

components.

MOBILITY

No data available.

PERSISTENCE AND DEGRADABILITY

This material is expected to be readily biodegradable. The product has not been tested. The statement has been derived from the properties of the individual components.

POTENTIAL TO BIOACCUMULATE

Bioconcentration Factor: No data available.

Partition coefficient n-octanol/water (logarithmic value): No data available

Other adverse effects

No other adverse effects identified.

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by international, country, or local laws and regulations.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

UN Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE UNITED NATIONS MODEL REGULATIONS/RECOMMENDATIONS

IMO/IMDG Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable

SECTION 15 REGULATORY INFORMATION

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1

01-2A=IARC Group 2A

01-2B=IARC Group 2B

02=Singapore, Hazardous Substances Control List

No components of this material were found on the regulatory lists above.

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AIIIC (Australia), ENCS (Japan), IECSC (China), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan).

One or more components does not comply with the following chemical inventory requirements: DSL (Canada), EINECS (European Union), ELINCS (European Union), TSCA (United States).

SECTION 16 OTHER INFORMATION

REVISION STATEMENT: SECTION 01 - Health Emergency information was modified.
SECTION 02 - Hazard Statements information was modified.
SECTION 02 - Health Classification information was modified.
SECTION 02 - Precautionary Statements information was modified.
SECTION 02 - Signal Word information was modified.
SECTION 03 - Composition information was modified.
SECTION 04 - First Aid - Eye information was modified.
SECTION 04 - First Aid - Ingestion information was modified.
SECTION 04 - First Aid - Note to Physicians information was deleted.
SECTION 04 - First Aid - Skin information was modified.
SECTION 05 - Fire Fighters Protection Measures information was modified.
SECTION 05 - Special hazards arising from the substance or mixture information was added.
SECTION 05 - Unusual Fire Fighting Hazards information was deleted.
SECTION 07 - Precautionary Measures information was modified.
SECTION 08 - Occupational Exposure Limit Table information was deleted.
SECTION 08 - Occupational Exposure Limit Table information was modified.
SECTION 08 - Respiratory Protection information was deleted.
SECTION 08 - Respiratory Protection information was modified.
SECTION 09 - Physical/Chemical Properties information was deleted.
SECTION 09 - Physical/Chemical Properties information was modified.
SECTION 11 - Additional Toxicology Information information was deleted.
SECTION 11 - Delayed Health Effects - Reproductive Toxicity information was modified.
SECTION 11 - Immediate Health Effects - Eye information was modified.
SECTION 11 - Immediate Health Effects - Ingestion information was modified.
SECTION 11 - Immediate Health Effects - Skin information was modified.
SECTION 11 - Reproductive Toxicity information was modified.
SECTION 11 - Toxicological Information information was modified.
SECTION 12 - Ecological Information information was modified.
SECTION 15 - Chemical Inventories information was added.
SECTION 15 - Chemical Inventories information was modified.

Revision Date: June 04, 2026

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Safety Data Sheet
CVX - Chevron	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

Prepared according to the Singapore Standard SS 586:3 2022

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