



Tutela LHM Brake Fluid

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

according to Canadian WHMIS

Date of issue: 01/22/2015 Revision date: 10/22/2015 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Product name : Tutela LHM Brake Fluid
Product code : 86541699DS

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

Use of the substance/mixture : Synthetic brake fluid

1.3. Details of the supplier of the safety data sheet

Viscosity Oil Company
600 H Joliet Road
Willowbrook, IL 60527
T 630-850-4000 - F 630-850-4022

1.4. Emergency telephone number

Emergency number : (800) 434-9300
CHEMTREC (24 HOURS)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 4 (Inhalation:dust,mist) H332
Repr. 2 H361

Full text of H-phrases: see section 16

Canadian WHMIS classification

Class D Division 2 Subdivision B - Toxic material causing other toxic effects

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H332 - Harmful if inhaled
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing mist, vapours, spray
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective clothing, protective gloves
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P308+P313 - If exposed or concerned: Get medical advice/attention
P312 - Call a POISON CENTER, a doctor if you feel unwell
P405 - Store locked up
P501 - Dispose in a safe manner in accordance with local and national regulations

Canadian WHMIS labelling



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2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Dec-1-ene, dimers, hydrogenated	(CAS No) 68649-11-6	0 - 20	Acute Tox. 4 (Inhalation:dust,mist), H332 Asp. Tox. 1, H304
reaction mass of: branched icosane branched docosane branched tetracosane	(CAS No) 151006-58-5	0 - 20	Acute Tox. 4 (Inhalation), H332 Aquatic Chronic 4, H413
Distillates (petroleum), solvent-dewaxed heavy paraffinic (DMSO <3%)	(CAS No) 64742-65-0	1 - 5	Acute Tox. 4 (Inhalation:dust,mist), H332 Asp. Tox. 1, H304
Distillates (petroleum), solvent-refined heavy paraffinic (DMSO <3%)	(CAS No) 64741-88-4	1 - 5	Acute Tox. 4 (Inhalation:dust,mist), H332
Phenol, isopropylated, phosphate (3:1)	(CAS No) 68937-41-7	0.1 - 1	Repr. 2, H361 Aquatic Chronic 3, H412

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.
- Symptoms/injuries after skin contact : May cause moderate irritation.
- Symptoms/injuries after eye contact : May cause slight irritation.
- Symptoms/injuries after ingestion : Nausea. Diarrhea. Vomiting.
- Chronic symptoms : Prolonged or repeated exposure can cause drying, defatting and dermatitis.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry powder. Foam. Carbon dioxide. Water fog.
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable.
- Explosion hazard : Product is not explosive.
- Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.

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Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

Protective equipment : Chemical goggles or safety glasses. Wear suitable gloves resistant to chemical penetration.

Emergency procedures : Evacuate unnecessary personnel. Stop leak, if possible without risk.

6.1.2. For emergency responders

Protective equipment : Chemical goggles or safety glasses. Wear suitable protective clothing and gloves. Where excessive vapour, mist, or dust may result, use approved respiratory protection equipment.

Emergency procedures : Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Small spills: Wipe up with absorbent material (e.g. cloth, fleece).

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing mist, spray, vapours.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in a dry, cool and well-ventilated place. Keep only in original container.

Incompatible products : Strong oxidizers.

Incompatible materials : Heat sources.

Prohibitions on mixed storage : Keep away from incompatible materials.

7.3. Specific end use(s)

Lubricant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)		
ACGIH	ACGIH TWA (mg/m ³)	5
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
OSHA	Not applicable	

Dec-1-ene, dimers, hydrogenated (68649-11-6)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ Source: ExxonMobil
OSHA	Not applicable	

reaction mass of: branched icosane branched docosane branched tetracosane (151006-58-5)		
ACGIH	Not applicable	

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reaction mass of: branched icosane branched docosane branched tetracosane (151006-58-5)	
OSHA	Not applicable
Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls	: Avoid creating mist or spray. Avoid splashing. Provide local exhaust or general room ventilation. Emergency safety showers should be available in the immediate vicinity of any potential exposure. Eyewash stations.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear suitable gloves resistant to chemical penetration. Use rubber gloves.
Eye protection	: In case of splashing or aerosol production: protective goggles.
Respiratory protection	: Where excessive vapour may result, wear approved mask. Organic vapor cartridge. Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material.
Thermal hazard protection	: Flame retardant clothing should be used when handling in molten state.
Other information	: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear liquid.
Colour	: Green
Odour	: petroleum-like odour
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: < -50 °C
Boiling point	: No data available
Flash point	: 177 °C Tag Closed Cup
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.83
Solubility	: insoluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 22 cSt @ 40 °C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Mixture of hydrocarbons. Phosphorus oxides. Nitrogen oxides. Sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation:dust,mist: Harmful if inhaled.

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ATE US (dust,mist)	3.371 mg/l/4h

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	2.18 mg/l
ATE US (vapours)	2.18 mg/l/4h
ATE US (dust,mist)	2.18 mg/l/4h

Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	2.18 mg/l/4h
ATE US (vapours)	2.18 mg/l/4h
ATE US (dust,mist)	2.18 mg/l/4h

Dec-1-ene, dimers, hydrogenated (68649-11-6)	
LD50 oral rat	> 5000 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	< 5 mg/l
ATE US (dust,mist)	1.5 mg/l/4h

reaction mass of: branched icosane branched docosane branched tetracosane (151006-58-5)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 1 mg/l/4h
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 200 mg/l 1 h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified.
Reproductive toxicity : Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure) : Not classified

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Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.
Symptoms/injuries after skin contact	: May cause moderate irritation.
Symptoms/injuries after eye contact	: May cause slight irritation.
Symptoms/injuries after ingestion	: Nausea. Diarrhea. Vomiting.
Chronic symptoms	: Prolonged or repeated exposure can cause drying, defatting and dermatitis.
Likely routes of exposure	: Skin and eyes contact; inhalation; ingestion.

SECTION 12: Ecological information

12.1. Toxicity

Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
LC50 fishes 1	> 100 mg/l Pimephales promelas 96 hr
ErC50 (algae)	> 100 mg/l
NOEC chronic crustacea	10 mg/l 21 day long-term Daphnia magna reproductive test

reaction mass of: branched icosane branched docosane branched tetracosane (151006-58-5)	
LC50 fishes 1	> 1000 mg/l 96 h Oncorhynchus mykiss
EC50 Daphnia 1	230 mg/l

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
LC50 fishes 1	50.1 ml/l 96 h Pimephales promelas
EC50 Daphnia 1	> 1000 mg/l
NOEC chronic fish	0.024 mg/l 30 d

12.2. Persistence and degradability

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Persistence and degradability	Not established.

Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
Persistence and degradability	Not readily biodegradable.

reaction mass of: branched icosane branched docosane branched tetracosane (151006-58-5)	
Persistence and degradability	Readily biodegradable.

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	17.9 % 28 d

12.3. Bioaccumulative potential

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Bioaccumulative potential	Not established.

reaction mass of: branched icosane branched docosane branched tetracosane (151006-58-5)	
Log Pow	> 4.61

Phenol, isopropylated, phosphate (3:1) (68937-41-7)	
Log Pow	4.92 - 5.17

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer	: None known
Effect on the global warming	: None known

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Dispose of in authorized waste collection plant.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Dispose of container in a licensed facility. Emptied container retains vapor and product residue.

SECTION 14: Transport information

In accordance with DOT
Not considered a dangerous good for transport regulations

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Dec-1-ene, dimers, hydrogenated (68649-11-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

reaction mass of: branched icosane|branched docosane|branched tetracosane (151006-58-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phenol, isopropylated, phosphate (3:1) (68937-41-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

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WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects This document has been prepared in accordance with the SDS requirements of the WHMIS Controlled Products Regulation
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Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Dec-1-ene, dimers, hydrogenated (68649-11-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

reaction mass of: branched icosane|branched docosane|branched tetracosane (151006-58-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Phenol, isopropylated, phosphate (3:1) (68937-41-7)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

reaction mass of: branched icosane|branched docosane|branched tetracosane (151006-58-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Phenol, isopropylated, phosphate (3:1) (68937-41-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Inhalation:dust,mist) H332

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xn; R20

15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Indication of changes	: Added WHMIS
Data sources	: Chemical Inspection & Regulation Service; accessed at: http://www.cirs-reach.com/Inventory/Global_Chemical_Inventories.html European Chemicals Agency (ECHA) Registered Substances list. Accessed at http://echa.europa.eu/ Kristen Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. OSHA 29CFR 1910.1200 Hazard Communication Standard. The Organisation for Economic Co-operation and Development (OECD; eChemPortal chemical searches. Accessed at http://www.echemportal.org/echemportal/substancesearch/substancesearchlink.action TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html
Abbreviations and acronyms	: AIHA: American Industrial Hygiene Association CAS (Chemical Abstracts Service) number. EC50: Environmental Concentration associated with a response by 50% of the test population. GHS: Globally Harmonized System (of Classification and Labeling) of Chemicals . LD50: Lethal Dose for 50% of the test population. TSCA: Toxic Substances Control Act. TWA: Time Weighted Average.
Other information	: None.

Full text of H-phrases:

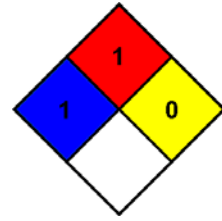
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
H304	May be fatal if swallowed and enters airways
H332	Harmful if inhaled
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

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- NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
- NFPA fire hazard : 1 - Must be preheated before ignition can occur.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



SDS US (GHS HazCom 2012)

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product