



SAFETY DATA SHEET

Tulp Operations Australia Pty Ltd

Product name: MOLYKOTE® Multigliss

Issue Date: 27.06.2024

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Tulp Operations Australia Pty Ltd encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product name: MOLYKOTE® Multigliss

Recommended use of the chemical and restrictions on use

Identified uses: Lubricants and lubricant additives

COMPANY IDENTIFICATION

Tulp Operations Australia Pty Ltd
15 Blackman Crescent
SOUTH WINDSOR NSW 2756
AUSTRALIA

Customer Information Number:

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SDSQuestion-AP@dupont.com

EMERGENCY TELEPHONE NUMBER

Local Emergency Contact: (02) 9037 2994

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification

| | |
|------------------------------------|--------------|
| Flammable liquids | : Category 4 |
| Aspiration hazard | : Category 1 |
| Short-term (acute) aquatic hazard | : Category 2 |
| Long-term (chronic) aquatic hazard | : Category 3 |

GHS label elements

Hazard pictograms



Signal word: DANGER!

Hazard statements

Combustible liquid.

May be fatal if swallowed and enters airways.
Toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary statements**Prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Avoid breathing spray.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
Do NOT induce vomiting.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage

Store in a well-ventilated place.

Disposal

Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements

Repeated exposure may cause skin dryness or cracking.

Other hazards

Vapours may form explosive mixture with air.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS, IN ACCORDANCE WITH SCHEDULE 8

This product is a mixture.

| Component | CASRN | Concentration |
|---|------------|--------------------|
| Distillates (petroleum), hydrotreated light | 64742-47-8 | >= 30.0 - < 50.0 % |
| Distillates, petroleum, hydrotreated light paraffinic | 64742-55-8 | >= 30.0 - < 50.0 % |
| 1H-Imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro- | 95-38-5 | >= 0.25 - < 1.0 % |

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Skin contact: Wash off with plenty of water.

Eye contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIREFIGHTING MEASURES

Hazchem Code

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Suitable extinguishing media: Water spray Alcohol-resistant foam Carbon dioxide (CO₂) Dry chemical

Unsuitable extinguishing media: High volume water jet Do not use direct water stream.

Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides Metal oxides

Unusual Fire and Explosion Hazards: Flash back possible over considerable distance. Exposure to combustion products may be a hazard to health. Vapours may form explosive mixtures with air.

Advice for firefighters

Fire Fighting Procedures: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Do not use a solid water stream as it may scatter and spread fire.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Remove all sources of ignition. Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions: Do not release the product to the aquatic environment above defined regulatory levels. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapours/mists with a water spray jet. Clean up remaining materials from spill with suitable absorbant. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.
See sections: 7, 8, 11, 12 and 13.

SECTION 7: HANDLING AND STORAGE, INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED

Precautions for safe handling: Do not get on skin or clothing. Avoid inhalation of vapour or mist. Do not swallow. Avoid contact with eyes. Keep container tightly closed. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice.
Use with local exhaust ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Advice on general occupational hygiene

Handle in accordance with good industrial hygiene and safety practice. Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Conditions for safe storage: Keep in properly labelled containers. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition.

Do not store with the following product types: Strong oxidizing agents. Explosives. Gases.

Unsuitable materials for containers: None known.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

| Component | Regulation | Type of listing | Value |
|---|------------|----------------------------------|---------------------|
| Distillates, petroleum, hydrotreated light paraffinic | ACGIH | TWA Inhalable particulate matter | 5 mg/m ³ |
| Further information: A4: Not classifiable as a human carcinogen | | | |

Exposure controls

Engineering measures: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Individual protection measures

Eye/face protection: Use safety glasses (with side shields).

Skin protection

Hand protection: Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process.

Other Information: Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including:

AS/NZS 1336: Eye and face protection – Guidelines.

AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.

AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.

AS/NZS 2161: Occupational protective gloves.

AS/NZS 2210: Occupational protective footwear.

AS/NZS 4501: Occupational protective clothing Set

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--|
| Appearance | |
| Physical state | liquid |
| Color | Straw-coloured |
| Odor | characteristic |
| Odor Threshold | No data available |
| pH | No data available |
| Melting point/range | No data available |
| Freezing point | No data available |
| Boiling point (760 mmHg) | > 100 °C |
| Flash point | Tag closed cup 64 °C |
| Evaporation Rate (Butyl Acetate = 1) | No data available |
| Flammability (solid, gas) | Not applicable |
| Lower explosion limit | No data available |
| Upper explosion limit | No data available |
| Vapor Pressure | No data available |
| Relative Vapor Density (air = 1) | No data available |
| Relative Density (water = 1) | 0.835 |
| Water solubility | No data available |
| Partition coefficient: n-octanol/water | No data available |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| Kinematic Viscosity | < 20.5 mm ² /s at 25 °C |
| Explosive properties | Not explosive |
| | |
| Oxidizing properties | The substance or mixture is not classified as oxidizing. |
| Molecular weight | No data available |
| Particle size | Not applicable |

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Can react with strong oxidizing agents. Vapours may form explosive mixture with air. Combustible liquid.

Conditions to avoid: Heat, flames and sparks.

Incompatible materials: Oxidizing agents

Hazardous decomposition products: 1-Butene.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

Acute toxicity

Acute oral toxicity

Product test data not available. Refer to component data.

Acute dermal toxicity

Product test data not available. Refer to component data.

Acute inhalation toxicity

Product test data not available. Refer to component data.

Skin corrosion/irritation

Product test data not available. Refer to component data.

Serious eye damage/eye irritation

Product test data not available. Refer to component data.

Sensitization

Product test data not available. Refer to component data.

Specific Target Organ Systemic Toxicity (Single Exposure)

Product test data not available. Refer to component data.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Product test data not available. Refer to component data.

Carcinogenicity

Product test data not available. Refer to component data.

Teratogenicity

Product test data not available. Refer to component data.

Reproductive toxicity

Product test data not available. Refer to component data.

Mutagenicity

Product test data not available. Refer to component data.

Aspiration Hazard

Product test data not available. Refer to component data.

COMPONENTS INFLUENCING TOXICOLOGY:**Distillates (petroleum), hydrotreated light****Acute oral toxicity**

Based on data from similar materials LD50, Rat, > 15,000 mg/kg

Acute dermal toxicity

Based on data from similar materials LD50, Rabbit, > 3,160 mg/kg

Acute inhalation toxicity

Based on data from similar materials LC50, Rat, 4 Hour, vapour, > 5.0 mg/l

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

Based on data from similar materials

Sensitization

Based on data from similar materials

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Based on data from similar materials

Aspiration Hazard

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Distillates, petroleum, hydrotreated light paraffinic**Acute oral toxicity**

For similar material(s): LD50, Rat, > 5,000 mg/kg

Acute dermal toxicity

For similar material(s): LD50, Rabbit, > 5,000 mg/kg

Acute inhalation toxicity

LC50, Rat, 4 Hour, dust/mist, > 4 mg/l

Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness.

Prolonged contact may cause skin irritation with local redness.

May cause drying and flaking of the skin.

Serious eye damage/eye irritation

May cause slight temporary eye irritation.
Corneal injury is unlikely.

Sensitization

For similar material(s):

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Available data are inadequate to determine single exposure specific target organ toxicity.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

For similar material(s):

In animals, effects have been reported on the following organs:

Adrenal gland.

Bone marrow.

Liver.

Thymus.

Stomach.

Lung.

Carcinogenicity

No relevant data found.

Teratogenicity

Typical for this family of materials. Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

Reproductive toxicity

In animal studies, did not interfere with reproduction.

Mutagenicity

In vitro genetic toxicity studies were negative in some cases and positive in other cases.

Animal genetic toxicity studies were negative.

Aspiration Hazard

May be fatal if swallowed and enters airways.

1H-Imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro-**Acute oral toxicity**

LD50, Rat, 1,265 mg/kg OECD Test Guideline 401

Acute dermal toxicity

The dermal LD50 has not been determined.

Acute inhalation toxicity

The LC50 has not been determined.

Skin corrosion/irritation

Brief contact may cause skin burns. Symptoms may include pain, severe local redness and tissue damage.

Serious eye damage/eye irritation

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Sensitization

Did not cause allergic skin reactions when tested in guinea pigs.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

In animals, effects have been reported on the following organs:

Gastrointestinal tract.

Thymus.

Teratogenicity

Did not cause birth defects or any other fetal effects in laboratory animals.

Reproductive toxicity

In animal studies, did not interfere with reproduction.

Mutagenicity

In vitro genetic toxicity studies were negative.

Aspiration Hazard

No aspiration toxicity classification

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

Ecotoxicity**Distillates (petroleum), hydrotreated light****Acute toxicity to fish**

Based on data from similar materials

LL50, Oncorhynchus mykiss (rainbow trout), 96 Hour, > 1,000 mg/l, OECD Test Guideline 203, Test substance: Water Accommodated Fraction

Acute toxicity to aquatic invertebrates

Based on data from similar materials

EL50, Daphnia magna (Water flea), 48 Hour, > 1,000 mg/l, OECD Test Guideline 202, Test substance: Water Accommodated Fraction

Acute toxicity to algae/aquatic plants

Based on data from similar materials

EL50, Pseudokirchneriella subcapitata (green algae), 72 Hour, > 1,000 mg/l, OECD Test Guideline 201, Test substance: Water Accommodated Fraction

Based on data from similar materials

NOELR, Pseudokirchneriella subcapitata (green algae), 72 Hour, 1,000 mg/l, OECD Test Guideline 201, Test substance: Water Accommodated Fraction

Toxicity to bacteria

Based on data from similar materials

EC50, Pseudomonas putida, 5 Hour, > 2 mg/l

Chronic toxicity to aquatic invertebrates

Based on data from similar materials

NOELR, Daphnia magna (Water flea), 21 d, > 1 mg/l, Test substance: Water Accommodated Fraction

Distillates, petroleum, hydrotreated light paraffinic**Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
LC50, Pimephales promelas (fathead minnow), 96 Hour, > 100 mg/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l

Acute toxicity to algae/aquatic plants

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, > 100 mg/l

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), 21 d, 10 mg/l, Test substance: Water Accommodated Fraction

1H-Imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro-**Acute toxicity to fish**

LC50, Danio rerio (zebra fish), 96 Hour, 0.3 mg/l, OECD Test Guideline 203

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 0.163 mg/l, OECD Test Guideline 202

Acute toxicity to algae/aquatic plants

EC50, Desmodesmus subspicatus (green algae), 72 Hour, 0.03 mg/l, OECD Test Guideline 201
EC10, Desmodesmus subspicatus (green algae), 72 Hour, 0.014 mg/l, OECD Test Guideline 201

Toxicity to bacteria

IC50, activated sludge, static test, 3 Hour, Respiration rates., 12 mg/l, OECD Test Guideline 209

Persistence and degradability**Distillates (petroleum), hydrotreated light**

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Biodegradation: 77.6 %

Exposure time: 28 d

Distillates, petroleum, hydrotreated light paraffinic

Biodegradability: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

10-day Window: Fail

Biodegradation: 31 %

Exposure time: 28 d

Method: OECD Test Guideline 301F or Equivalent

1H-Imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro-

Biodegradability: Not readily biodegradable.

Biodegradation: 1 %

Exposure time: 28 d

Method: OECD Test Guideline 301B

Bioaccumulative potential

Distillates, petroleum, hydrotreated light paraffinic

Bioaccumulation: For this family of materials: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

1H-Imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro-

Bioaccumulation: Does not bioaccumulate. Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).

Partition coefficient: n-octanol/water(log Pow): 7.51 at 25 °C

Mobility in Soil

Distillates, petroleum, hydrotreated light paraffinic

No relevant data found.

1H-Imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro-

Expected to be relatively immobile in soil (Koc > 5000).

Partition coefficient (Koc): 125200

Results of PBT and vPvB assessment

Distillates (petroleum), hydrotreated light

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Distillates, petroleum, hydrotreated light paraffinic

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

1H-Imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro-

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Other adverse effects

Distillates (petroleum), hydrotreated light

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Distillates, petroleum, hydrotreated light paraffinic

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

1H-Imidazole-1-ethanol, 2-(8-heptadecenyl)-4,5-dihydro-

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section 10 Regulatory Information, MSDS Section 15

Treatment and disposal methods of used packaging: Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Do not re-use containers for any purpose.

SECTION 14: TRANSPORT INFORMATION

ADG

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

**Transport in bulk
according to Annex I or II
of MARPOL 73/78 and the
IBC or IGC Code**

Not regulated for transport
Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Not regulated for transport

Hazchem Code

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This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

Poison Schedule

Schedule 5

Product repackaged for public consumer use should be labelled in accordance with the current Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Inventory of Industrial Chemicals (AIIC)

All ingredients in this preparation are listed in the Australian Inventory of Industrial Chemicals, AIIC, or are exempt.

Prohibition/Licensing Requirements : Neither banned nor restricted

SECTION 16: ANY OTHER RELEVANT INFORMATION

Revision

Identification Number: 3166333 / A847 / Issue Date: 27.06.2024 / Version: 6.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

| | |
|-------|---|
| ACGIH | USA. ACGIH Threshold Limit Values (TLV) |
| TWA | 8-hour, time-weighted average |

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization;

IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Tulp Operations Australia Pty Ltd urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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