

## **SAFETY DATA SHEET**

**Tulp Operations Australia Pty Ltd** 

Product name: MOLYKOTE® TP-42 Paste Issue Date: 15.07.2024

**Print Date: 24.07.2024** 

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® TP-42 Paste

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: +61 2 9923 6111

SDSQuestion-AP@dupont.com

**EMERGENCY TELEPHONE NUMBER Local Emergency Contact:** (02) 9037 2994

## **SECTION 2: HAZARD(S) IDENTIFICATION**

#### **GHS Classification**

Not classified as hazardous according to the criteria of the Work Health and Safety Regulations, Australia.

#### Other hazards

No data available

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

This product is a mixture.

Component	CASRN	Concentration
Calcium hydroxide	1305-62-0	>= 30.0 - < 50.0 %

White mineral oil (petroleum)	8042-47-5	>= 20.0 - < 30.0 %
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	>= 10.0 - < 20.0 %
Solvent dewaxed heavy paraffinic distillates	64742-65-0	>= 1.0 - < 10.0 %
Paraffin/Hydrocarbon waxes	8002-74-2	>= 1.0 - < 10.0 %
Lithium 12-hydroxyoctadecanoate	7620-77-1	>= 1.0 - < 10.0 %

## **SECTION 4: FIRST AID MEASURES**

## Description of first aid measures

## General advice:

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:** No emergency medical treatment necessary.

## 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**

None Allocated

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

Unsuitable extinguishing media: None known.

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#### Special hazards arising from the substance or mixture

**Hazardous combustion products:** Metal oxides Carbon oxides Oxides of phosphorus Formaldehyde

Unusual Fire and Explosion Hazards: Exposure to combustion products may be a hazard to health.

#### Advice for firefighters

**Fire Fighting Procedures:** 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.

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** Follow safe handling advice and personal protective equipment recommendations.

**Removal of ignition sources:** Keep away from sources of ignition.

Dust Control: Use care to minimize generation of airborne dust.

**Environmental precautions:** Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. 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:** Wipe up or scrape up and contain for salvage or disposal. 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:** Avoid prolonged or repeated contact with skin. 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.

**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.

Do not store with the following product types: Strong oxidizing agents. Unsuitable materials for containers: None known.

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## 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
White mineral oil (petroleum)	ACGIH	TWA Inhalable	5 mg/m3
		particulate matter	
	Further information: A4: No	t classifiable as a human care	cinogen
Distillates (petroleum),	ACGIH	TWA Inhalable	5 mg/m3
hydrotreated heavy		particulate matter	
naphthenic			
	Further information: A4: Not classifiable as a human carcinogen		
Solvent dewaxed heavy	ACGIH	TWA Inhalable	5 mg/m3
paraffinic distillates		particulate matter	
	Further information: A4: Not classifiable as a human carcinogen		
	AU OEL	TWA Mist	5 mg/m3
Paraffin/Hydrocarbon waxes	ACGIH	TWA	2 mg/m3
	Further information: URT irr: Upper Respiratory Tract irritation; nausea: Nausea		
	ACGIH	TWA Fumes	2 mg/m3
	AU OEL	TWA	2 mg/m3
	Further information: H: ACC	SIH is the documentation sou	rce
	AU OEL	TWA Fumes	2 mg/m3
Lithium 12-	ACGIH	TWA Inhalable	10 mg/m3
hydroxyoctadecanoate		particulate matter	
	Further information: A4: No	t classifiable as a human care	cinogen
	ACGIH	TWA Respirable	3 mg/m3
		particulate matter	
	Further information: A4: No	t classifiable as a human care	
	AU OEL	TWA	10 mg/m3

Although some of the components of this product may have exposure guidelines, no exposure would be expected under normal handling conditions due to the physical state of the material.

#### **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. Local exhaust ventilation may be necessary for some operations.

## Individual protection measures

Eye/face protection: Use chemical goggles.

Skin protection

**Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Viton. Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex").

Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to AS/NZS 2161.10) is recommended. 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: Wear clean, body-covering clothing.

**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. For most conditions, no respiratory protection should be needed; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge.

**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 paste
Color white
Odor none

Odor Threshold

PH

Not applicable

Melting point/ range

Freezing point

Boiling point (760 mmHg)

Flash point

No data available

No data available

Not applicable

closed cup 160 °C

**Evaporation Rate (Butyl Acetate** 

= 1)

Not applicable

Flammability (solid, gas) Not classified as a flammability hazard

Lower explosion limitNo data availableUpper explosion limitNo data availableVapor PressureNot applicableRelative Vapor Density (air = 1)No data available

Relative Density (water = 1) 1.1

Product name: MOLYKOTE® TP-42 Paste

Water solubility

No data available

Partition coefficient: n
No data available

octanol/water

Auto-ignition temperature

Decomposition temperature

Dynamic Viscosity

Kinematic Viscosity

Explosive properties

No data available
No data available
Not applicable
Not applicable
Not explosive

Oxidizing properties The substance or mixture is not classified as oxidizing.

Molecular weightNo data availableParticle sizeNo data available

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.

Conditions to avoid: None known.

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

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s): LD50, Rat, > 5,000 mg/kg Estimated.

#### Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

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Based on information for component(s):

LD50, Rabbit, > 2,000 mg/kg Estimated.

#### Acute inhalation toxicity

Brief exposure (minutes) is not likely to cause adverse effects. Vapor from heated material may cause respiratory irritation.

As product: The LC50 has not been determined.

#### Skin corrosion/irritation

Based on product testing:

Brief contact is essentially nonirritating to skin.

#### Serious eye damage/eye irritation

Based on product testing:

May cause moderate eye irritation.

Effects are likely to heal readily.

Corneal injury is unlikely.

#### Sensitization

For skin sensitization:

Contains component(s) which did not cause allergic skin sensitization in guinea pigs.

Contains component(s) which have not demonstrated the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

#### **Specific Target Organ Systemic Toxicity (Single Exposure)**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

## **Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Contains component(s) which have been reported to cause effects on the following organs in animals: Liver.

#### Carcinogenicity

Contains component(s) which did not cause cancer in laboratory animals.

## Teratogenicity

Contains component(s) which, in laboratory animals, have been toxic to the fetus only at doses toxic to the mother. Contains component(s) which did not cause birth defects in laboratory animals.

#### Reproductive toxicity

Contains component(s) which did not interfere with reproduction in animal studies.

## Mutagenicity

Contains component(s) which were negative in some in vitro genetic toxicity studies and positive in others. Contains component(s) which were negative in animal genetic toxicity studies.

#### **Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

#### COMPONENTS INFLUENCING TOXICOLOGY:

#### Calcium hydroxide

#### Acute inhalation toxicity

LC50, Rat, 4 Hour, dust/mist, > 6.04 mg/l OECD Test Guideline 436

#### White mineral oil (petroleum)

## Acute inhalation toxicity

LC50, Rat, 4 Hour, dust/mist, > 5 mg/l OECD Test Guideline 403

## Distillates (petroleum), hydrotreated heavy naphthenic

## **Acute inhalation toxicity**

Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs.

LC50, Rat, 3 Hour, dust/mist, > 3.11 mg/l No deaths occurred at this concentration.

#### Solvent dewaxed heavy paraffinic distillates

#### Acute inhalation toxicity

LC50, Rat, male and female, 4 Hour, dust/mist, > 5 mg/l No deaths occurred at this concentration.

#### Paraffin/Hydrocarbon waxes

## Acute inhalation toxicity

The LC50 has not been determined.

#### Lithium 12-hydroxyoctadecanoate

#### Acute inhalation toxicity

The LC50 has not been determined.

## **SECTION 12: ECOLOGICAL INFORMATION**

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

## **Ecotoxicity**

#### Calcium hydroxide

## Acute toxicity to algae/aquatic plants

EC50, Raphidocelis subcapitata (freshwater green alga), 72 Hour, 184.47 mg/l, OECD Test Guideline 201

NOEC, Raphidocelis subcapitata (freshwater green alga), 72 Hour, 48 mg/l, OECD Test Guideline 201

#### Toxicity to bacteria

EC50, 3 Hour, 300.4 mg/l, OECD Test Guideline 209

## Chronic toxicity to aquatic invertebrates

NOEC, 14 d, 32 mg/l

## White mineral oil (petroleum)

## Acute toxicity to fish

Information given is based on data obtained from similar substances. LC50, Leuciscus idus (Golden orfe), 96 Hour, > 10,000 mg/l, OECD Test Guideline 203

#### Acute toxicity to aquatic invertebrates

Information given is based on data obtained from similar substances.

EC50, Daphnia magna (Water flea), 48 Hour, > 100 mg/l, OECD Test Guideline 202

## Acute toxicity to algae/aquatic plants

NOEC, Pseudokirchneriella subcapitata (green algae), 72 Hour, 100 mg/l, OECD Test Guideline 201

## Chronic toxicity to aquatic invertebrates

Based on data from similar materials

NOEC, Daphnia magna (Water flea), 21 d, 10 mg/l

## Distillates (petroleum), hydrotreated heavy naphthenic

## 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, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, > 5,000 mg/l, OECD Test Guideline 203 or Equivalent

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

EC50, scud Gammarus sp., 96 Hour, > 10,000 mg/l, Method Not Specified.

#### Acute toxicity to algae/aquatic plants

EbC50, alga Scenedesmus sp., static test, 96 Hour, Biomass, > 1,000 mg/l, OECD Test Guideline 201 or Equivalent

## Chronic toxicity to fish

NOEC, Pimephales promelas (fathead minnow), 7 d, growth, > 5,000 mg/l

#### Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), 21 d, number of offspring, > 1,000 mg/l

#### Solvent dewaxed heavy paraffinic distillates

#### 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).

LL50, Pimephales promelas (fathead minnow), static test, 96 Hour, > 100 mg/l

#### Acute toxicity to aquatic invertebrates

EL50, Daphnia magna (Water flea), static test, 48 Hour, > 10,000 mg/l

## Acute toxicity to algae/aquatic plants

NOEC, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate, > 100 mg/l

#### Toxicity to bacteria

Based on data from similar materials

NOEC, 10 min, > 1.93 mg/l, DIN 38 412 Part 8

#### Chronic toxicity to aquatic invertebrates

Based on data from similar materials NOEC, Daphnia magna (Water flea), 21 d, 10 mg/l

#### Paraffin/Hydrocarbon waxes

## Acute toxicity to fish

Information given is based on data obtained from similar substances.

LC50, Pimephales promelas (fathead minnow), 96 Hour, > 100 mg/l, OECD Test Guideline 203

#### Acute toxicity to aquatic invertebrates

Information given is based on data obtained from similar substances. LC50, Daphnia magna (Water flea), 48 Hour, > 10,000 mg/l, OECD Test Guideline 202

## Acute toxicity to algae/aquatic plants

EC50, Raphidocelis subcapitata (freshwater green alga), 72 Hour, > 1,000 mg/l Information given is based on data obtained from similar substances. NOEC, Raphidocelis subcapitata (freshwater green alga), 72 Hour, >= 100 mg/l, OECD Test Guideline 201

#### Chronic toxicity to fish

NOEC, Oncorhynchus mykiss (rainbow trout), 28 d, >= 1,000 mg/l

#### Chronic toxicity to aquatic invertebrates

Information given is based on data obtained from similar product. NOEC, Daphnia magna, 21 d, 10 mg/l

#### Lithium 12-hydroxyoctadecanoate

#### 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, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, > 100 mg/l, OECD Test Guideline 203

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, > 100 mg/l, OECD Test Guideline 202

#### Acute toxicity to algae/aquatic plants

EC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate, > 160 mg/l, OECD Test Guideline 201

## Persistence and degradability

#### White mineral oil (petroleum)

**Biodegradability:** Not readily biodegradable. Information given is based on data obtained from similar substances.

**Biodegradation:** 31 % **Exposure time:** 28 d

Method: OECD Test Guideline 301F

Theoretical Oxygen Demand: 3.50 mg/mg

#### **Photodegradation**

Test Type: Half-life (indirect photolysis)

**Sensitization:** OH radicals **Atmospheric half-life:** 1.291 d

Method: Estimated.

## Distillates (petroleum), hydrotreated heavy naphthenic

**Biodegradability:** Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability. Material is inherently biodegradable

(reaches > 20% biodegradation in OECD test(s) for inherent biodegradability).

10-day Window: Fail **Biodegradation:** 6 % **Exposure time:** 28 d

Method: OECD Test Guideline 301B or Equivalent

10-day Window: Fail Biodegradation: 22 - 51 % Exposure time: 21 - 28 d

**Photodegradation** 

Test Type: Half-life (indirect photolysis)

Sensitization: OH radicals

## Solvent dewaxed heavy paraffinic distillates

Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails

to pass OECD/EEC tests for ready biodegradability.

10-day Window: Fail **Biodegradation:** 2 % **Exposure time:** 28 d

Method: OECD Test Guideline 301B

#### Paraffin/Hydrocarbon waxes

Biodegradability: Readily biodegradable.

Biodegradation: 80 % Exposure time: 28 d

Method: OECD Test Guideline 301B

#### Lithium 12-hydroxyoctadecanoate

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

biodegradability. 10-day Window: Pass Biodegradation: 78 % Exposure time: 28 d

Method: OECD Test Guideline 301C

#### Bioaccumulative potential

#### Calcium hydroxide

Bioaccumulation: Not applicable

#### White mineral oil (petroleum)

Bioaccumulation: Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and

7).

Partition coefficient: n-octanol/water(log Pow): 5.18 Measured

## Distillates (petroleum), hydrotreated heavy naphthenic

**Bioaccumulation:** Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

Partition coefficient: n-octanol/water(log Pow): 3.9 - 6 Estimated.

## Solvent dewaxed heavy paraffinic distillates

**Bioaccumulation:** Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7)

Partition coefficient: n-octanol/water(log Pow): 3.9 - 6 Estimated.

#### Paraffin/Hydrocarbon waxes

Bioaccumulation: Not applicable

Partition coefficient: n-octanol/water(log Pow): 3.17 - 18.02

## Lithium 12-hydroxyoctadecanoate

Bioaccumulation: No relevant data found.

#### **Mobility in Soil**

## **Calcium hydroxide**

No relevant data found.

#### White mineral oil (petroleum)

Potential for mobility in soil is low (Koc between 500 and 2000).

Partition coefficient (Koc): 510 Estimated.

#### Distillates (petroleum), hydrotreated heavy naphthenic

No data available.

#### Solvent dewaxed heavy paraffinic distillates

No relevant data found.

#### **Lithium 12-hydroxyoctadecanoate**

No relevant data found.

#### Results of PBT and vPvB assessment

#### Calcium hydroxide

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

#### White mineral oil (petroleum)

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).

#### Distillates (petroleum), hydrotreated heavy naphthenic

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

#### Solvent dewaxed heavy paraffinic distillates

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).

#### Paraffin/Hydrocarbon waxes

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

#### Lithium 12-hydroxyoctadecanoate

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

#### Other adverse effects

#### Calcium hydroxide

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

## White mineral oil (petroleum)

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

#### Distillates (petroleum), hydrotreated heavy naphthenic

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

#### Solvent dewaxed heavy paraffinic distillates

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

## Paraffin/Hydrocarbon waxes

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

#### **Lithium 12-hydroxyoctadecanoate**

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: Recycler. Reclaimer. 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):**

Not regulated for transport

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

Consult IMO regulations before transporting ocean bulk

#### Classification for AIR transport (IATA/ICAO):

Not regulated for transport

## Hazchem Code

None Allocated

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: 1553003 / A847 / Issue Date: 15.07.2024 / Version: 3.0 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)
AU OEL	Australia. Workplace Exposure Standards for Airborne Contaminants.
TWA	Exposure standard - 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

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