

## SAFETY DATA SHEET

DOW CHEMICAL (AUSTRALIA) PTY LTD

## Product name: DOWSIL<sup>™</sup> PR-1200 RTV Prime Coat

Issue Date: 12.07.2022 Print Date: 13.07.2022

DOW CHEMICAL (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: DOWSIL™ PR-1200 RTV Prime Coat

Recommended use of the chemical and restrictions on use Identified uses: Adhesive, binding agents

## COMPANY IDENTIFICATION

DOW CHEMICAL (AUSTRALIA) PTY LTD LEVEL 29 367 COLLINS STREET MELBOURNE VIC 3000 AUSTRALIA

**Customer Information Number:** 

1800-780-074 SDSQuestion@dow.com

## EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 1800-033-882 Local Emergency Contact: 1800-033-882 For advice, contact a doctor (at once) or the Australian Poisons Information Centre: 131 126 Transport Emergency Only Dial 000

## SECTION 2: HAZARD(S) IDENTIFICATION

## **GHS Classification**

Flammable liquids - Category 2 Skin corrosion/irritation - Category 2 Serious eye damage/eye irritation - Category 1 Specific target organ toxicity - single exposure - Category 3 Aspiration hazard - Category 1 Short-term (acute) aquatic hazard - Category 2 Long-term (chronic) aquatic hazard - Category 2

GHS label elements Hazard pictograms



Signal word: DANGER!

## Hazard statements

Highly flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye damage. May cause drowsiness or dizziness. Toxic 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. Keep container tightly closed. Avoid breathing mist or vapours. 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. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER and/or doctor. Do NOT induce vomiting. In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish. Collect spillage.

## Other hazards

Static-accumulating flammable liquid.

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

This product is a mixture. <b>Component</b>	CASRN	Concentration
Distillates, petroleum, light distillate hydrotreating process, low-boiling	68410-97-9	>= 82.0 - <= 88.0 %

Tetrakis(2-butoxyethyl) orthosilicate	18765-38-3	>= 4.0 - <= 6.0 %
Tetra n-Butyl titanate	5593-70-4	>= 4.0 - <= 6.0 %
Octane	111-65-9	<= 1.4 %

## **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 and keep comfortable for breathing. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

**Skin contact:** Wash off with plenty of water. Suitable emergency safety shower facility should be available in work area.

**Eye contact:** Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

**Ingestion:** Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

## Most important symptoms and effects, both acute and delayed:

May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye damage. May cause drowsiness or dizziness.

## Indication of any immediate medical attention and special treatment needed

**Notes to physician:** Maintain adequate ventilation and oxygenation of the patient. May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. The decision of whether to induce vomiting or not should be made by a physician. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Repeated excessive exposure may aggravate preexisting lung disease. Skin contact may aggravate preexisting dermatitis.

## **SECTION 5: FIREFIGHTING MEASURES**

Hazchem Code •3YE

## Extinguishing media

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

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

### Special hazards arising from the substance or mixture

Hazardous combustion products: Silicon oxides. Formaldehyde. 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.. Flammable concentrations of vapor can accumulate at temperatures above flash point; see Section 9.. Flammable mixtures may exist within the vapor space of containers at room temperature.. Closed containers may rupture via pressure build-up when exposed to fire or extreme heat.. Vapours may form explosive mixtures with air..

## Advice for firefighters

**Fire Fighting Procedures:** Use water spray to cool unopened containers.. Evacuate area.. 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. Remove undamaged containers from fire area if it is safe to do so.

**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. Ventilate the area. Use personal protective equipment. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Ground and bond all containers and handling equipment. Vapor explosion hazard. Keep out of sewers. 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, store recovered material in appropriate container. 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. Do not breathe vapours or spray mist. Do not swallow. Do not get in 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. Non-sparking tools should be used. Handle in accordance with good industrial hygiene and safety practice. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all (M)SDS and label warnings even after container is emptied.

Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation. Ensure all equipment is electrically grounded before beginning transfer operations. This material can accumulate static charge due to its inherent physical properties and can therefore cause an electrical ignition source to vapors. In order to prevent a fire hazard, as bonding and grounding may be insufficient to remove static electricity, it isnecessary to provide an inert gas purge before beginning transfer operations. Restrict flow velocity in order to reduce the accumulation of static electricity. Ground and bond container and receiving equipment.

**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. Organic peroxides. Flammable solids. Pyrophoric liquids. Pyrophoric solids. Self-heating substances and mixtures. Substances and mixtures, which in contact with water, emit flammable gases. 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, light distillate hydrotreating process, low-boiling	AU OEL	TWA	900 mg/m3
Octane	ACGIH	TWA	300 ppm
	AU OEL	TWA	1,400 mg/m3 300 ppm
	AU OEL	STEL	1,750 mg/m3 375 ppm
Ethylene glycol monobutyl ether	ACGIH	TWA	20 ppm
	Further information: A3: Confirmed animal carcinogen with unknown relevance to		

	humans		
	AU OEL	TWA	96.9 mg/m3 20 ppm
	Further information: Sk: Skin absor	ption	
	AU OEL	STEL	242 mg/m3 50 ppm
	Further information: Sk: Skin absor	ption	
Butanol	ACGIH	TWA	20 ppm
	AU OEL	Peak limit	152 mg/m3 50 ppm
	Further information: Sk: Skin absor	ption	
Propyl alcohol	ACGIH	TWA	100 ppm
	Further information: A4: Not classifiable as a human carcinogen		
	AU OEL	STEL	614 mg/m3 250 ppm
	Further information: Sk: Skin absor	ption	
	AU OEL	TWA	492 mg/m3 200 ppm
	Further information: Sk: Skin absor	ption	

The following substance(s), which have Occupational Exposure Limit(s) (OEL), may be formed during handling or processing:, Ethylene glycol monobutyl ether, Propyl alcohol, butanol

## **Biological occupational exposure limits**

Components	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
Ethylene glycol monobutyl ether	111-76-2	Butoxyaceti c acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200 mg/g Creatinine	ACGIH BEI

## Exposure controls

**Engineering controls:** Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

## Individual protection measures

Eye/face protection: Use chemical goggles.

## Skin protection

Hand protection: 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 chloride ("PVC" or "vinyl"). Viton. Polyvinyl alcohol ("PVA"). Examples of acceptable glove barrier materials include: Butyl rubber. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, 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:** 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. In misty atmospheres, use an approved particulate respirator.
The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

**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**

Physical state	liquid
Color	Colorless to pale yellow
Odor	solvent-like
Odor Threshold	No data available
рН	Not applicable, substance/mixture is non-soluble (in water)
Melting point/freezing point	
Melting point/range	No data available
Freezing point	No data available
Boiling point, initial boiling point	and boiling range
Boiling point (760 mmHg)	> 80 °C
Flash point	Tag closed cup 13 °C
Evaporation Rate (Butyl Acetate = 1)	No data available
Flammability	
Flammability (solid, gas)	Not applicable
Flammability (liquids)	No data available
Lower explosion limit and upper	explosion limit / flammability limit
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor Pressure	No data available
Relative vapour density	
Relative Vapor Density (air = 1)	No data available
Density and / or relative density	

Relative Density (water = 1)	0.76
Solubility(ies)	
Water solubility	insoluble
Partition coefficient: n- octanol/water (log value)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic Viscosity	1 mm2/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 characteristics	
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. Highly flammable liquid and vapour.

Conditions to avoid: Avoid static discharge. Heat, flames and sparks.

**Incompatible materials:** Avoid contact with oxidizing materials.

## Hazardous decomposition products:

Decomposition products can include and are not limited to: Ethylene glycol monobutyl ether. Propyl alcohol. Butanol.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

## Exposure routes

Inhalation, Eye contact, Skin contact, Ingestion.

## Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)

## Acute Toxicity Endpoints:

Not classified based on available information.

## Acute oral toxicity

## Information for the Product:

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.

## Information for components:

### Distillates, petroleum, light distillate hydrotreating process, low-boiling

For similar material(s): LD50, Rat, male and female, > 5,000 mg/kg OECD 401 or equivalent No deaths occurred at this concentration.

## Tetrakis(2-butoxyethyl) orthosilicate

LD50, Rat, > 2,000 mg/kg

## Tetra n-Butyl titanate

LD50, Rat, male, 4,220 mg/kg

## Octane

For similar material(s): LD50, Rat, male and female, > 5,000 mg/kg OECD 401 or equivalent

## Acute dermal toxicity

### Information for the Product:

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

As product: The dermal LD50 has not been determined.

Based on information for component(s): LD50, > 2,000 mg/kg Estimated.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

For similar material(s): LD50, Rabbit, male and female, > 2,000 mg/kg OECD 402 or equivalent No deaths occurred at this concentration.

## Tetrakis(2-butoxyethyl) orthosilicate

Information taken from reference works and the literature. LD50, Rat, > 2,000 mg/kg

## Tetra n-Butyl titanate

LD50, Rabbit, 5,300 mg/kg

### <u>Octane</u>

For similar material(s): LD50, Rabbit, male and female, > 2,000 mg/kg OECD 402 or equivalent No deaths occurred at this concentration.

## Acute inhalation toxicity

## Information for the Product:

Brief exposure (minutes) is not likely to cause adverse effects. Excessive exposure may cause: lung effects Central nervous system depression Mist may cause irritation of upper respiratory tract (nose and throat) and lungs.

As product: The LC50 has not been determined.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

Brief exposure (minutes) is not likely to cause adverse effects. Excessive exposure may cause: lung effects Central nervous system depression

For similar material(s): LC50, Rat, 4 Hour, vapour, > 5.61 mg/l

## Tetrakis(2-butoxyethyl) orthosilicate

Brief exposure (minutes) is not likely to cause adverse effects.

## Tetra n-Butyl titanate

LC50, Rat, 4 Hour, dust/mist, 11 mg/l

## **Octane**

LC50, Rat, male and female, 4 Hour, vapour, > 24.88 mg/l OECD Test Guideline 403 No deaths occurred at this concentration.

## Skin corrosion/irritation

Causes skin irritation.

## Information for the Product:

Based on information for component(s): Brief contact may cause moderate skin irritation with local redness. Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage. May cause pain. May cause drying and flaking of the skin.

### Information for components:

**Distillates, petroleum, light distillate hydrotreating process, low-boiling** For similar material(s): Brief contact may cause severe skin irritation with pain and local redness.

### Tetrakis(2-butoxyethyl) orthosilicate

Brief contact may cause moderate skin irritation with local redness.

## Tetra n-Butyl titanate

Prolonged contact may cause moderate skin irritation with local redness.

## <u>Octane</u>

Prolonged contact may cause skin irritation with local redness. Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage. May cause pain. May cause drying and flaking of the skin.

## Serious eye damage/eye irritation

Causes serious eye damage.

## Information for the Product:

Based on information for component(s): May cause moderate eye irritation. May cause severe corneal injury. May cause permanent impairment of vision.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

For similar material(s): May cause slight temporary eye irritation. Corneal injury is unlikely.

## Tetrakis(2-butoxyethyl) orthosilicate

Essentially nonirritating to eyes.

## Tetra n-Butyl titanate

May cause moderate eye irritation. May cause severe corneal injury. May cause permanent impairment of vision.

## <u>Octane</u>

May cause pain disproportionate to the level of irritation to eye tissues. May cause slight temporary eye irritation. May cause slight temporary corneal injury.

## Sensitization

## For skin sensitization:

Not classified based on available information.

### For respiratory sensitization:

Not classified based on available information.

### Information for the Product:

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

For respiratory sensitization: No relevant data found.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

For skin sensitization: For similar material(s): Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization: No relevant data found.

## Tetrakis(2-butoxyethyl) orthosilicate

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

No relevant data found.

## Tetra n-Butyl titanate

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization: No relevant data found.

## Octane

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)

May cause drowsiness or dizziness.

### Information for the Product:

Product test data not available.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

May cause drowsiness or dizziness. Route of Exposure: Inhalation Target Organs: Central nervous system

### Tetrakis(2-butoxyethyl) orthosilicate

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

## Tetra n-Butyl titanate

May cause respiratory irritation. Route of Exposure: Inhalation Target Organs: Respiratory Tract May cause drowsiness or dizziness. Route of Exposure: Inhalation Target Organs: Nervous system

## Octane

May cause drowsiness or dizziness. Route of Exposure: Inhalation Target Organs: Central nervous system

## **Aspiration Hazard**

May be fatal if swallowed and enters airways.

## Information for the Product:

Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

## Information for components:

## **Distillates, petroleum, light distillate hydrotreating process, low-boiling** May be fatal if swallowed and enters airways.

## Tetrakis(2-butoxyethyl) orthosilicate

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

## Tetra n-Butyl titanate

Based on available information, aspiration hazard could not be determined.

## <u>Octane</u>

May be fatal if swallowed and enters airways.

## Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

## Specific Target Organ Systemic Toxicity (Repeated Exposure)

Not classified based on available information.

## Information for the Product:

Product test data not available.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

For similar material(s): Kidney effects have been observed in male rats. These effects are believed to be species specific and unlikely to occur in humans.

## Tetrakis(2-butoxyethyl) orthosilicate

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

## Tetra n-Butyl titanate

No relevant data found.

## <u>Octane</u>

No relevant data found.

## Carcinogenicity

Not classified based on available information.

## Information for the Product:

Product test data not available.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

Kidney effects and/or tumors have been observed in male rats. These effects are believed to be species specific and unlikely to occur in humans.

## Tetrakis(2-butoxyethyl) orthosilicate

No relevant data found.

## Tetra n-Butyl titanate

No relevant data found.

Octane No relevant data found.

## Teratogenicity

Not classified based on available information.

## Information for the Product:

Product test data not available.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

For similar material(s): Did not cause birth defects or any other fetal effects in laboratory animals.

<u>Tetrakis(2-butoxyethyl) orthosilicate</u> Did not cause birth defects in laboratory animals.

## Tetra n-Butyl titanate

No relevant data found.

### **Octane**

For similar material(s): Did not cause birth defects in laboratory animals.

## **Reproductive toxicity**

Not classified based on available information.

## Information for the Product:

Product test data not available.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

For similar material(s): In animal studies, did not interfere with reproduction.

## Tetrakis(2-butoxyethyl) orthosilicate

In laboratory animals, excessive doses toxic to the parent animals caused decreased weight and survival of offspring.

## Tetra n-Butyl titanate

No relevant data found.

## Octane

For similar material(s): In animal studies, did not interfere with reproduction.

## Mutagenicity

Not classified based on available information.

## Information for the Product:

Product test data not available.

## Information for components:

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

For similar material(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

## Tetrakis(2-butoxyethyl) orthosilicate

No relevant data found.

### Tetra n-Butyl titanate

No relevant data found.

### <u>Octane</u>

For similar material(s): In vitro genetic toxicity studies were negative.

## SECTION 12: ECOLOGICAL INFORMATION

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

## Ecotoxicity

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

### Acute toxicity to fish

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LL50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, 10 mg/l, OECD Test Guideline 203 or Equivalent

## Acute toxicity to aquatic invertebrates

EL50, Daphnia magna (Water flea), static test, 48 Hour, 4.5 mg/l, OECD Test Guideline 202 or Equivalent

## Acute toxicity to algae/aquatic plants

For similar material(s): EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate, 3.1 mg/l, OECD Test Guideline 201 For similar material(s): NOELR, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate, 0.5 mg/l, OECD Test Guideline 201

## Chronic toxicity to fish

For similar material(s): NOELR, Pimephales promelas (fathead minnow), semi-static test, 14 d, mortality, 2.6 mg/l

## Chronic toxicity to aquatic invertebrates

Based on data from similar materials NOELR, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, 2.6 mg/l

## Tetrakis(2-butoxyethyl) orthosilicate

Acute toxicity to fish Material is practically non-toxic to fish on an acute basis (LC50 > 100 mg/L). LC50, Danio rerio (zebra fish), 96 Hour, > 201 mg/l, OECD Test Guideline 203

## Acute toxicity to aquatic invertebrates

No toxicity at the limit of solubility EC50, Daphnia sp. (water flea), 48 Hour, > 90 mg/l, EG 84/449

## Acute toxicity to algae/aquatic plants

ErC50, Scenedesmus subspicatus, 72 Hour, > 161 mg/l, 88/302/EC

## Tetra n-Butyl titanate

Acute toxicity to fish No relevant data found.

## <u>Octane</u>

### Acute toxicity to fish

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested). LC50, Oryzias latipes (Orange-red killifish), 96 Hour, 0.42 mg/l

### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 0.3 mg/l, Method Not Specified.

### Acute toxicity to algae/aquatic plants

Pseudokirchneriella subcapita, 72 Hour, Growth rate, >1.1 mg/l

## Chronic toxicity to aquatic invertebrates

Based on data from similar materials NOEC, Daphnia magna (Water flea), 21 d, 0.17 mg/l

### Persistence and degradability

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

**Biodegradability:** No relevant data found.

## Tetrakis(2-butoxyethyl) orthosilicate

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. 10-day Window: Pass Biodegradation: 83 % Method: OECD Test Guideline 301B

## Tetra n-Butyl titanate

Biodegradability: No relevant data found.

## **Octane**

**Biodegradability:** Material is expected to be readily biodegradable.

**Biodegradation:** > 60 % **Exposure time:** 20 d **Method:** Other guidelines

## **Bioaccumulative potential**

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

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

Tetrakis(2-butoxyethyl) orthosilicate Bioaccumulation: No relevant data found.

## Tetra n-Butyl titanate

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). **Partition coefficient: n-octanol/water(log Pow):** 0.88 Estimated.

### Octane

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5). **Partition coefficient: n-octanol/water(log Pow):** 5.15 Literature **Bioconcentration factor (BCF):** 198.7 Mytilus eduli (saltwater mussels) 105 min

### Mobility in Soil

Distillates, petroleum, light distillate hydrotreating process, low-boiling No relevant data found.

Tetrakis(2-butoxyethyl) orthosilicate No relevant data found.

No relevant data lound

## Tetra n-Butyl titanate

No relevant data found.

## Octane

Potential for mobility in soil is medium (Koc between 150 and 500). **Partition coefficient (Koc):** 436.8 Estimated.

## Results of PBT and vPvB assessment

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

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).

### Tetrakis(2-butoxyethyl) orthosilicate

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

#### Tetra n-Butyl titanate

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

### **Octane**

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).

## Other adverse effects

## Distillates, petroleum, light distillate hydrotreating process, low-boiling

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

### Tetrakis(2-butoxyethyl) orthosilicate

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

### Tetra n-Butyl titanate

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

### <u>Octane</u>

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 Section10 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

Proper shipping name UN number Class Packing group Marine pollutant	ADHESIVES UN 1133 3 II Distillates, petroleum, light distillate hydrotreating process, low-boiling
Classification for SEA transport (	IMO-IMDG):
Proper shipping name	
UN number	UN 1133
Class	3
Packing group Marine pollutant	II Distillates, petroleum, light distillate hydrotreating process,
	low-boiling
Transport in bulk	Consult IMO regulations before transporting ocean bulk
according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	
Classification for AIR transport (I	ATA/ICAO):
Proper shipping name	Adhesives
UN number	UN 1133
Class Booking group	3
Packing group	II
Hazchem Code •3YE	

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 Not Scheduled

Australian Inventory of Industrial Chemicals (AIIC)

All substances contained in this product are listed on the Australian Inventory of Industrial Chemicals, or are not required to be listed.

Prohibition/Licensing Requirements

There is no applicable prohibition, authorisation and restricted use requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regulations.

## SECTION 16: ANY OTHER RELEVANT INFORMATION

## Revision

Identification Number: 6022257 / A142 / Issue Date: 12.07.2022 / Version: 10.0 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)
ACGIH BEI	ACGIH - Biological Exposure Indices (BEI)
AU OEL	Australia. Workplace Exposure Standards for Airborne Contaminants.
Peak limit	Exposure standard - peak
STEL	Exposure standard - short term exposure limit
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

DOW CHEMICAL (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)SDS 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. AU