

#### 1. IDENTIFICATION

**Product Name** Calcium hypochlorite, hydrated (UN2880)

**Other Names** Bleaching powder; Calcium hypochlorite, hydrated, with not less than 5.5% but not more than 16% water; Calcium

oxychloride; Chlorinated lime

Uses Water treatment agent; Bleaching agent.

**Chemical Family** No Data Available **Chemical Formula** CaCl202.H20 **Chemical Name** Calcium hypochlorite **Product Description** No Data Available

### Contact Details of the Supplier of this Safety Data Sheet

| Organisation | Location  | Telephone       |
|--------------|---|-----------------|
| Redox Ltd    | 2 Swettenham Road<br>Minto NSW 2566<br>Australia                  | +61-2-97333000  |
| Redox Ltd    | 11 Mayo Road<br>Wiri Auckland 2104<br>New Zealand                 | +64-9-2506222   |
| Redox Inc.   | 3960 Paramount Boulevard<br>Suite 107<br>Lakewood CA 90712<br>USA | +1-424-675-3200 |

Redox Chemicals Sdn Bhd Level 2, No. 8, Jalan Sapir 33/7

Seksyen 33, Shah Alam Premier Industrial Park

40400 Shah Alam Sengalor, Malaysia

## **Emergency Contact Details**

For emergencies only; DO NOT contact these companies for general product advice.

| Organisation               | Location     | Telephone                                  |
|----------------------------|--------------|--|
| Poisons Information Centre | Westmead NSW | 1800-251525<br>131126                      |
| Chemcall                   | Australia    | 1800-127406<br>+64-4-9179888               |
| Chemcall                   | Malaysia     | +64-4-9179888                              |
| Chemcall                   | New Zealand  | 0800-243622<br>+64-4-9179888               |
| National Poisons Centre    | New Zealand  | 0800-764766                                |
| CHEMTREC                   | USA & Canada | 1-800-424-9300 CN723420<br>+1-703-527-3887 |

#### 2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) Schedule 6 +60-3-5614-2111



#### **Globally Harmonised System**

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Hazard Categories Oxidising Solids - Category 2

Acute Toxicity (Oral) - Category 4
Skin Corrosion/Irritation - Category 1B
Serious Eye Damage/Irritation - Category 1

Specific Target Organ Toxicity (Single Exposure) - Category 3
Acute Hazard To The Aquatic Environment - Category 1

**Pictograms** 









Signal Word Danger

**Hazard Statements H272** May intensify fire; oxidizer.

**H302** Harmful if swallowed.

**H314** Causes severe skin burns and eye damage.

**H335** May cause respiratory irritation.

**H400** Very toxic to aquatic life.

AUH031 Contact with acids liberates toxic gas

Precautionary Statements Prevention P210 Keep away from heat.

**P221** Take any precaution to avoid mixing with combustibles/organic material.

P260 Do not breathe dusts or mists.

**P280** Wear protective gloves/protective clothing/eye protection/face protection.

**P273** Avoid release to the environment.

P270 Do not eat, drink or smoke when using this product.P271 Use only outdoors or in a well-ventilated area.

Response P370 + P378 In case of fire: Use water for extinction.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

**P310** Immediately call a POISON CENTER or doctor.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**P363** Wash contaminated clothing before reuse.

P391 Collect spillage

P304 + P340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing.

Storage **P403 + P233** Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal P501 Dispose of contents/container in accordance with local / regional / national /

international regulations.

## **National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification** 

Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by

Road & Rail (ADG Code)

#### Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

**Hazard Classification** 

Hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

| Chemical Entity                              | Formula     | CAS Number  | Proportion |
|--|-------------|-------------|------------|
| Available Chlorine (as Calcium hypochlorite) | Ca(CIO)2    | 7778-54-3   | >=65 %     |
| Calcium hydroxide                            | Ca(OH)2     | 1305-62-0   | <=6 %      |
| Water  | H20         | 7732-18-5   | 5 - 10 %   |
| Ingredients determined not to be hazardous   | Unspecified | Unspecified | Balance %  |

#### 4. FIRST AID MEASURES

#### Description of necessary measures according to routes of exposure

**Swallowed** 

IF SWALLOWED: Rinse mouth, then drink (sip) a glass of water. Call a Poison Centre or doctor/physician for advice or phone for an ambulance immediately. Do NOT induce vomiting. If vomiting occurs spontaneously, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Transport to hospital or doctor without delay! Never give anything by mouth to an unconscious person.

Eye

IF IN EYES: Call a Poison Centre or doctor/physician for advice or phone for an ambulance immediately. Immediately flush eyes with (lukewarm) running water for at least 20 minutes, holding eyelids open and occasionally lifting the upper and lower lids - DO NOT INTERRUPT FLUSHING (If necessary, keep emergency vehicle waiting). Neutral saline solution may be used if it is available. Transport to hospital or doctor without delay! Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. Take care not to rinse contaminated water into the non-affected eye.

Skin

IF IN SKIN (or hair): Immediately flush skin and hair with (lukewarm) running water for at least 20 minutes while removing contaminated clothing and shoes - DO NOT INTERRUPT FLUSHING (If necessary, keep emergency vehicle waiting). For gross contamination - Drench contaminated clothing and skin with plenty of water before removing clothes. For minor skin contact, avoid spreading material on unaffected skin. Call a Poison Centre or doctor/physician for advice or phone for an ambulance immediately. Transport to hospital or doctor without delay! Wash contaminated clothing and shoes before reuse; Discard contaminated leather goods.

Inhaled

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Centre or doctor/physician for advice or phone for an ambulance immediately. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Transport to hospital or doctor without delay!

**Advice to Doctor** 

Treat symptomatically. Keep victim calm and warm. Ensure that attending medical personnel are aware of identity and nature of the product(s) involved, and take precautions to protect themselves.

\*Delayed effects from exposure to chlorine can include shortness of breath, severe headache, pulmonary oedema and

pneumonia.

 $\label{thm:medical conditions Aggravated by} \ \ \mbox{No information available}.$ 

**Exposure** 

#### **5. FIRE FIGHTING MEASURES**

General Measures If safe to do so, move undamaged containers from fire area. Do not move cargo if cargo has been exposed to heat. Cool

containers with flooding quantities of water until well after fire is out - If impossible, withdraw from area and let fire burn. Avoid getting water inside containers: a violent reaction may occur. Dam fire control water for later disposal. ALWAYS

stay away from tank ends.

Flammability Conditions OXIDISING SUBSTANCE: Non-combustible; however, will accelerate burning when involved in a fire. May ignite

combustibles.

Extinguishing Media USE FLOODING QUANTITIES OF WATER for extinction - Do not use dry chemicals, or foam.

\*Large fire: Flood fire area with water from a protected position.

Fire and Explosion Hazard Risk of violent reaction or explosion! May intensify fire; oxidizer. May explode from heating, shock, friction or

contamination. Containers may explode when heated. Decomposes on contact with water evolving toxic chlorine gas! \*Calcium hypochlorite is a powerful oxidising agent and decomposes violently upon heating liberating oxygen, and toxic

chlorine gas. In case of fire, area must be evacuated and specialist fire fighters called.

**Hazardous Products of** 

Combustion

Fire may produce irritating, toxic and/or corrosive gases, including Carbon oxides, halogenated compounds, metal

oxides.

Special Fire Fighting Instructions Contain runoff from fire control or dilution water - Runoff may cause pollution. Runoff may create fire or explosion hazard!

\*All water utilised to assist in fume suppression, decontamination or fire suppression may be contaminated and must be

contained before disposal and/or treatment. Monitor all exit water for available chlorine and pH.

Personal Protective Equipment Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing - It may provide

little or no thermal protection. Structural firefighters' protective clothing will only provide limited protection.

Flash Point
No Data Available
Lower Explosion Limit
No Data Available
Upper Explosion Limit
No Data Available
Auto Ignition Temperature
No Data Available

Hazchem Code 1W

### **6. ACCIDENTAL RELEASE MEASURES**

General Response Procedure Ensure adequate ventilation. ELIMINATE all ignition sources. Prevent exposure to heat. Do not contaminate - Keep

combustibles away from spilled material. Clean up all spills immediately. Avoid dust formation. Do not breathe

dust/vapours and prevent contact with eyes, skin and clothing.

Clean Up Procedures Sweep up, avoiding generation of dust, then immediately spread as a thin layer in uncontaminated, dry, open area to

reduce the possibility of local hot spots forming. Use clean, non-sparking tools to transfer material to a clean, dry container for disposal and cover loosely (see SECTION 13). Move container from spill area. Do not seal disposal containers tightly. Do NOT return spilled material to original container for re-use. Do NOT add small amounts of water to Calcium

hypochlorite.

Containment Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Prevent dust cloud.

\*Where a spill has occurred in a confined space or an inadequately ventilated enclosure and the material is damp and evolving chlorine, the rate of chlorine evolution can be reduced by covering the thinly spread solid with soda ash.

**Decontamination**All water utilised to assist in fume suppression, decontamination or fire suppression may be contaminated and must be

contained before disposal and/or treatment. Monitor all exit water for available chlorine and pH.

**Environmental Precautionary** 

Measures

Spillages and decontamination runoff should be prevented from entering drains and watercourses. Advise local

authorities of any contaminated water release.

**Evacuation Criteria** Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher

ground.

\*Large spill: Immediately contact Police or Fire Brigade; Consider initial downwind evacuation of areas within at least 100

m.

Personal Precautionary Measures Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (see SECTION 8).

#### 7. HANDLING AND STORAGE

#### Handling

Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation - Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Avoid dust formation. Do not breathe dust and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection (see SECTION 8). OXIDISING MATERIAL: Keep away from heat and all sources of ignition - No smoking. Do not contaminate - Take any precaution to avoid mixing with combustibles. Do not mix with or allow product to come into contact with any other chemicals, including different types of chlorinating chemicals. Do not add water to product - Always add product to large quantities of water to fully dissolve (but in case of fire, drench with water). Use clean, spark-proof tools and explosion-proof equipment. Avoid release to the environment - Collect spillage (see SECTION 6).

#### Storage

Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep containers closed when not in use. Protect containers from physical damage. Check containers regularly for corrosion or leaks. Protect from moisture/humidity - Do not allow to get damp. If product becomes contaminated or decomposes, do NOT reseal container - may lead to drum rupture. Keep away from heat and all sources of ignition - No smoking. Keep away from foodstuffs, combustibles and other incompatible materials (see SECTION 10). Store locked up.

\*Prolonged storage at elevated temperatures will significantly shorten the shelf life, and may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products.

Container

Keep in the original container. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### General

No specific exposure standards are available for this product.

COMPONENT: Calcium hydroxide (CAS No. 1305-62-0):

- Safe Work Australia Exposure Standard: TWA = 5 mg/m3.
- New Zealand Workplace Exposure Standard [Next review 2022]: TWA = 5 mg/m3.

COMPONENT: Calcium carbonate (CAS No. 471-34-1):

- Safe Work Australia Exposure Standard: TWA = 10 mg/m3 (This value is for inhalable dust containing no asbestos and <1% crystalline silica).
- New Zealand Workplace Exposure Standard: TWA = 10 mg/m3. DECOMPOSITION PRODUCT: Chlorine gas (CAS No. 7782-50-5):
- Safe Work Australia Exposure Standard: TWA = 1 ppm (3 mg/m3) Peak limitation.
- New Zealand Workplace Exposure Standard [Next review 2023]: TWA = 0.5 ppm (1.5 mg/m3); STEL = 1 ppm (2.9 mg/m3).

#### **Exposure Limits**

No Data Available

**Biological Limits** 

No information available.

**Engineering Measures** 

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

### **Personal Protection Equipment**

- Respiratory protection: Wear respiratory protection in case of inadequate ventilation or if levels above the exposure limits are possible. Recommended: Approved full-face air purifying respirator equipped with combination chlorine/P100 cartridges. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres, or if exposure concentrations exceed ten (10) times the published limit.
- Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Wear chemical splash goggles and face shield.
- Hand protection: Wear protective gloves. Recommended: Chemical-resistant, impervious gloves, e.g. Nitrile, neoprene, butyl rubber.
- Skin/body protection: Wear appropriate personal protective clothing to prevent skin contact. Recommended: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. A full impervious suit is recommended if exposure is possible to a large portion of the body.

### **Special Hazards Precaustions**

No information available.

### **Work Hygienic Practices**

Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Remove contaminated clothing and shoes immediately and wash before reuse. Discard contaminated leather goods.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State** Solid

**Appearance** Crystalline, powder or granule

Odour Chlorine

Colour White to off-white pН No Data Available **Vapour Pressure** No Data Available **Relative Vapour Density** No Data Available **Boiling Point** No Data Available **Melting Point** No Data Available **Freezing Point** No Data Available Solubility Soluble in water **Specific Gravity** No Data Available Flash Point No Data Available

**Auto Ignition Temp** No Data Available **Evaporation Rate** No Data Available **Bulk Density** No Data Available

170 - 180 °C **Decomposition Temperature** 

Density No Data Available **Specific Heat** No Data Available **Molecular Weight** No Data Available **Net Propellant Weight** No Data Available **Octanol Water Coefficient** No Data Available **Particle Size** No Data Available **Partition Coefficient** No Data Available **Saturated Vapour Concentration** No Data Available **Vapour Temperature** No Data Available Viscosity No Data Available

**Additional Characteristics** No information available. No information available. **Potential for Dust Explosion** 

**Fast or Intensely Burning** 

Characteristics

**Volatile Percent** 

**VOC Volume** 

**Corrosion Rate** 

Risk of violent reaction or explosion! May intensify fire; oxidizer. May explode from heating, shock, friction or

contamination.

No Data Available

No Data Available

No Data Available

Flame Propagation or Burning

**Rate of Solid Materials** 

**Non-Flammables That Could** Contribute Unusual Hazards to a

No information available.

Decomposes on contact with water evolving toxic chlorine gas!

**Properties That May Initiate or Contribute to Fire Intensity** 

OXIDISING SUBSTANCE: Non-combustible; however, will accelerate burning when involved in a fire. May ignite combustibles.

Reactions That Release Gases or **Vapours** 

Fire may produce irritating, toxic and/or corrosive gases, including Carbon oxides, halogenated compounds, metal oxides.

Release of Invisible Flammable

Vapours and Gases

Calcium hypochlorite is a powerful oxidising agent and decomposes violently upon heating liberating oxygen, and toxic chlorine gas. Explosive and toxic nitrogen trichloride is formed by contact with chlorinated isocyanuric acid.

#### 10. STABILITY AND REACTIVITY

General Information Corrosive to metals in the presence of moisture. Decomposes on contact with water evolving toxic chlorine gas! Contact

with acids liberates toxic gas.

Chemical Stability Calcium hypochlorite is a powerful oxidising agent - Decomposition occurs on exposure to heat, reducing agents,

combustible materials.

Conditions to Avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid exposure to direct sunlight.

Avoid exposure to moisture.

Materials to Avoid incompatible/reactive with dichloroisocyanuric acid, ammonium nitrate, trichloroisocyanuric acid, or any

chloroisocyanurate, acids, aluminium, iron, lead, magnesium, zinc, organic materials, combustible materials, reducing agents, ammonia, nitrogen compounds, acidic materials, cyanides, hydrogen peroxide, chlorinated isocyanuric acid

(organic bleaching powder), copper.

**Hazardous Decomposition** 

**Products** 

Fire may produce irritating, toxic and/or corrosive gases, including Carbon oxides, halogenated compounds, metal

oxides. Decomposes violently upon heating liberating oxygen, and toxic chlorine gas.

**Hazardous Polymerisation** This product will not undergo polymerisation reactions.

#### 11. TOXICOLOGICAL INFORMATION

#### **General Information**

- Acute toxicity: Harmful if swallowed. Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract. The chemical is incompatible with acidic conditions, where it can react with acids to release toxic chlorine gas.
- Skin corrosion/irritation: Causes severe skin burns. The dry material is moderately irritating to the skin; However, when wet, it will produce burns to the skin.
- Eye damage/irritation: Causes serious eye damage. Corrosive to eyes. Contamination of eyes can result in corneal burns and permanent injury.
- Respiratory/skin sensitisation: This material is not known or reported to be a skin or respiratory sensitiser.
- Germ cell mutagenicity: Not considered to be genotoxic.
- Carcinogenicity: Not known or reported to be carcinogenic. Hypochlorite salts are classified by the IARC Monographs as "Not classifiable as to its carcinogenicity to humans" (Group 3).
- Reproductive toxicity: No specific reproductive or developmental toxicity.
- STOT (single exposure): May cause respiratory irritation. Chlorine, evolved from decomposition when wet, is a severe respiratory irritant, corrosive, and highly toxic. Delayed effects can include shortness of breath, headache, pulmonary oedema, and pneumonia.
- STOT (repeated exposure): No systemic adverse effects following repeated oral/dermal exposure.
- Aspiration toxicity: No information available.

Acute

**Ingestion** Acute toxicity (Oral):

COMPONENT: Calcium hypochlorite (CAS No. 7778-54-3):

- LD50, Rat: 790 mg/kg bw.

Carcinogen Category None

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Aquatic toxicity:

COMPONENT: Calcium hypochlorite (CAS No. 7778-54-3):

- LC50, Fish (Bluegill): 0.088 mg/l (96 h) [nominal, static].

- LC50, Fish (Rainbow trout): 0.16 mg/l (96 h) [nominal, static].

- LC50, Crustacea (Daphnia magna): 0.11 mg/l (48 h) [nominal, static].

**Persistence/Degradability** This material is biodegradable.

No information available.

Environmental Fate

Mobility

Very toxic to aquatic life - Prevent entry into drains and waterways.

**Bioaccumulation Potential** Expected to have a low bioaccumulation potential.

Environmental Impact No Data Available

### 13. DISPOSAL CONSIDERATIONS

General Information If recycling or reclamation is not possible, dispose of (contents/container) via a commercial waste disposal service and in

accordance with local/regional/national regulations.

Special Precautions for Land Fill No information available.

#### 14. TRANSPORT INFORMATION

## Land Transport (Australia)

ADG Code

Proper Shipping Name CALCIUM HYPOCHLORITE, HYDRATED MIXTURE with not less than 5.5% but not more than 16% water

Class 5.1 Oxidising Substances

Subsidiary Risk(s) No Data Available

**EPG** 31 Oxidizing Substances

 UN Number
 2880

 Hazchem
 1W

 Pack Group
 II

Special Provision No Data Available

## Land Transport (Malaysia)

ADR Code

Proper Shipping Name CALCIUM HYPOCHLORITE, HYDRATED MIXTURE with not less than 5.5% but not more than 16% water

Class 5.1 Oxidising Substances

Subsidiary Risk(s) No Data Available

**EPG** 31 Oxidizing Substances

UN Number 2880
Hazchem 1W
Pack Group ||

**Special Provision** No Data Available

### Land Transport (New Zealand)

NZS5433

Proper Shipping Name CALCIUM HYPOCHLORITE, HYDRATED MIXTURE with not less than 5.5% but not more than 16% water

Class 5.1 Oxidising Substances

Subsidiary Risk(s) No Data Available

EPG 31 Oxidizing Substances

UN Number 2880 Hazchem 1W Pack Group II

**Special Provision** No Data Available

## **Land Transport (United States of America)**

**US DOT** 

Proper Shipping Name CALCIUM HYPOCHLORITE, HYDRATED MIXTURE with not less than 5.5% but not more than 16% water

Class 5.1 Oxidising Substances

Subsidiary Risk(s) No Data Available ERG 140 Oxidizers
UN Number 2880

Hazchem 1W
Pack Group ||

**Special Provision** No Data Available

**Sea Transport** 

IMDG Code

Proper Shipping Name CALCIUM HYPOCHLORITE, HYDRATED MIXTURE with not less than 5.5% but not more than 16% water

Class 5.1 Oxidising Substances

Subsidiary Risk(s) No Data Available

UN Number 2880 Hazchem 1W Pack Group II

Special Provision No Data Available

**EMS** F-H, S-Q

Marine Pollutant Yes

**Air Transport** 

IATA DGR

Class 5.1 Oxidising Substances
Subsidiary Risk(s) No Data Available

UN Number 2880 Hazchem 1W Pack Group II

**Special Provision** No Data Available

## **National Transport Commission (Australia)**

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification**Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by

Road & Rail (ADG Code)

## 15. REGULATORY INFORMATION

**General Information** CHLORINATING COMPOUNDS are listed in Schedule 6 of the SUSMP.

Poisons Schedule (Aust) Schedule 6

#### **Environmental Protection Authority (New Zealand)**

Hazardous Substances and New Organisms Amendment Act 2015

Approval Code HSR002632 - Oxidising Liquids and Solids (Corrosive) Group Standard 2020

### **National/Regional Inventories**

Australia (AIIC) Listed

Canada (DSL) Listed

Canada (NDSL) Not Listed

China (IECSC) Listed

**Europe (EINECS)** 231-908-7

Europe (REACh) Listed

Japan (ENCS/METI) Listed

Korea (KECI) Listed

Malaysia (EHS Register) Listed

New Zealand (NZIoC) Listed

Philippines (PICCS) Listed

Switzerland (Giftliste 1) Not Determined

**Switzerland (Inventory of Notified** 

Substances)

Not Determined

Taiwan (NCSR) Listed

USA (TSCA) Listed

#### **16. OTHER INFORMATION**

#### **Related Product Codes**

CAHYPO0500, CAHYPO0600, CAHYPO0700, CAHYPO0800, CAHYPO0805, CAHYPO0810, CAHYPO0900, CAHYPO1000, CAHYPO1001, CAHYPO1002, CAHYPO1003, CAHYPO1004, CAHYPO1005, CAHYPO1006, CAHYPO1007, CAHYPO1008, CAHYPO1009, CAHYPO1010, CAHYPO1011, CAHYPO1012, CAHYPO1013, CAHYPO1014, CAHYPO1015, CAHYPO1016, CAHYPO1017, CAHYPO1018, CAHYPO1019, CAHYPO1020, CAHYPO1021, CAHYPO1022, CAHYPO1023, CAHYPO1026, CAHYPO1100, CAHYPO1200, CAHYPO1210, CAHYPO1225, CAHYPO1240, CAHYPO1500, CAHYPO1600, CAHYPO1800, CAHYPO1801, CAHYPO1802, CAHYPO1803, CAHYPO1804, CAHYPO1805, CAHYPO1806, CAHYPO2000, CAHYPO2001, CAHYPO2002, CAHYPO2003, CAHYPO2004, CAHYPO2005, CAHYPO2006, CAHYPO2100, CAHYPO2500, CAHYPO3000, CAHYPO3001, CAHYPO4000, CAHYPO4001, CAHYPO4500, CAHYPO5000, CAHYPO5500, CAHYPO6000, CAHYPO6500, CAHYPO6501, CAHYPO6502, CAHYPO6503, CAHYPO6504, CAHYPO6505, CAHYPO6506, CAHYPO6507, CAHYPO6508, CAHYPO6509, CAHYPO6510, CAHYPO6511, CAHYPO6512, CAHYPO6513, CAHYPO6514, CAHYPO6515, CAHYPO6540, CAHYPO6800, CAHYPO6801, CAHYPO6802, CAHYPO6803, CAHYPO6804, CAHYPO6900, CAHYPO7000, CAHYPO7015, CAHYPO7040, CAHYPO7500, CAHYPO8000, CAHYPO8001, CAHYPO8500, CAHYPO8501, CAHYPO8700, CAHYPO8800, CAHYPO8850, CAHYPO8900, CAHYPO9000, CAHYPO9001, CAHYPO9025, CAHYPO9100, CAHYPO9200, CAHYPO9201, CAHYPO9202, CAHYPO9203, CAHYPO9300, CAHYPO9301, CAHYPO9302, CAHYPO9400, CAHYPO9401, CAHYPO9405, CAHYPO9410, CAHYPO9500, CAHYPO9501, CAHYPO9502, CAHYPO9525, CAHYPO9600, CAHYPO9601, CAHYPO9602, CAHYPO9615, CAHYPO9700, CAHYPO9701, CAHYPO9725, CAHYPO9800, CAHYPO9900

Revision 6

**Revision Date** 25 Aug 2021

**Key/Legend** < Less Than > Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square CentimetresCO2 Carbon Dioxide

**COD** Chemical Oxygen Demand **deg C (°C)** Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

g Grams

g/cm<sup>3</sup> Grams per Cubic Centimetre

g/I Grams per Litre

**HSNO** Hazardous Substance and New Organism **IDLH** Immediately Dangerous to Life and Health **immiscible** Liquids are insoluable in each other.

inHg Inch of Mercury inH2O Inch of Water

**K** Kelvin **kg** Kilogram

kg/m3 Kilograms per Cubic Metre

Ib Pound

**LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

Itr or L Litre m<sup>3</sup> Cubic Metre mbar Millibar

mg Milligram
mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH2O Millimetres of Water mPa.s Millipascals per Second

N/A Not Applicable

**NIOSH** National Institute for Occupational Safety and Health **NOHSC** National Occupational Heath and Safety Commission

**OECD** Organisation for Economic Co-operation and Development

Oz Ounce

**PEL** Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion
ppm Parts per Million

ppm/2h Parts per Million per 2 Hoursppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

**R** Rankine

**RCP** Reciprocal Calculation Procedure

**STEL** Short Term Exposure Limit

**TLV** Threshold Limit Value

tne Tonne

**TWA** Time Weighted Average

ug/24H Micrograms per 24 Hours

**UN** United Nations

wt Weight