

## SAFETY DATA SHEET

### Section 1. Identification of the material and the supplier

Product: **PG MIX 12-14-24**  
 Item Code: PF712K  
 Product Use: Fertiliser  
 Restriction of Use: Refer to Section 15

New Zealand Supplier: Horticulture Ltd  
 Address: 10 Firth Street  
 Drury, 2113

Telephone: +64 9 294 8453  
 Fax Number: +64 9 294 7272

**Emergency Telephone: 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 10 April 2024 v2

### Section 2. Hazards Identification

**This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020**

**EPA Approval No: Fertilisers (subsidiary) – HSR002571**

Signal Word: **Warning**

| GHS Classification and Category                     | Hazard Code | Hazard Statement                                   |
|-----------------------------------------------------|-------------|----------------------------------------------------|
| Hazardous to the aquatic environment chronic Cat. 3 | H412        | Harmful to aquatic life with long lasting effects. |

| Prevention Code | Prevention Statement              |
|-----------------|-----------------------------------|
| P273            | Avoid release to the environment. |

| Response Code  | Response Statement |
|----------------|--------------------|
| None allocated |                    |

| Storage Code   | Storage Statement |
|----------------|-------------------|
| None allocated |                   |

| Disposal Code | Disposal Statement                                       |
|---------------|----------------------------------------------------------|
| P501          | Dispose of according to Local Regulations or Authorities |

### Section 3. Composition / Information on Ingredients

| Ingredients                  | Wt%          | CAS NUMBER. |
|------------------------------|--------------|-------------|
| Copper Sulphate Pentahydrate | >= 0.3 - < 1 | 7758-99-8   |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8. The total concentration of ingredients in this product, reported or not in this section, is 100%.

Remark: This product contains Boron (see section 7 and 11). The content is below the level required for classification of the product as toxic to reproduction.

#### **Section 4. First Aid Measures**

Routes of Exposure:

|              |                                                                                                                                                                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| If in Eyes   | Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, call doctor/physician.                                                                                      |
| If on Skin   | Wash skin with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.                                                                                                                                                       |
| If Swallowed | Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if you feel unwell. |
| If Inhaled   | Remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. Get medical attention if you feel unwell. The exposed person may need to be kept under medical surveillance for 48 hours.                      |

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

|                                    |                                                                                                                                                                                                                                                                                               |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Symptoms:</b>                   | Refer to Section 11.                                                                                                                                                                                                                                                                          |
| <b>Ingestion:</b>                  | Not applicable.                                                                                                                                                                                                                                                                               |
| <b>Inhalation:</b>                 | Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure                                                                                                                                                                               |
| <b>Skin:</b>                       | Not applicable.                                                                                                                                                                                                                                                                               |
| <b>Eyes:</b>                       | Not applicable.                                                                                                                                                                                                                                                                               |
| <b>Treatment:</b>                  | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| <b>Protection of first-aiders:</b> | No action shall be taken involving any personal risk or without suitable training.                                                                                                                                                                                                            |

#### **Section 5. Fire Fighting Measures**

|                                                                     |                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hazard Type</b>                                                  | Non Flammable, Non-combustible material.                                                                                                                                                                                                                                                        |
| <b>Hazards from decomposition products</b>                          | Decomposition products may include the following materials: nitrogen oxides, sulfur oxides, phosphorus oxides, metal oxide/oxides, ammonia, Avoid breathing dusts, vapors or fumes from burning materials., In case of inhalation of decomposition products in a fire, symptoms may be delayed. |
| <b>Suitable Extinguishing media</b>                                 | Use flooding quantities of water for extinction. Do NOT use chemical extinguisher or foam or attempt to smother the fire with steam or sand.                                                                                                                                                    |
| <b>Precautions for firefighters and special protective clothing</b> | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.                    |

|                     |                                                                                    |
|---------------------|------------------------------------------------------------------------------------|
|                     | No action shall be taken involving any personal risk or without suitable training. |
| <b>HAZCHEM CODE</b> | <b>None allocated</b>                                                              |

**Section 6. Accidental Release Measures**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

**SMALL SPILLS**

Move containers from spill area. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

**LARGE SPILLS**

Move containers from spill area. Approach release from upwind. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

**Section 7. Handling and Storage**

**Precautions for Handling:**

- Put on appropriate personal protective equipment (see Section 8).
- As a precaution, keep exposure as low as possible for pregnant women, children and workers in reproductive age.
- Avoid dust generation.
- Do not breathe dust.
- Do not ingest.
- Avoid contact with eyes, skin and clothing.
- Avoid release to the environment.
- Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.
- Empty containers retain product residue and can be hazardous.
- Do not reuse container.
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
- Workers should wash hands and face before eating, drinking and smoking.
- Remove contaminated clothing and protective equipment before entering eating areas.

**Precautions for Storage:**

- Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see Section 10) and food and drink.
- Keep container tightly closed and sealed until ready for use.
- Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
- Do not store in unlabeled containers.
- Use appropriate containment to avoid environmental contamination.
- Keep away from: organic materials, oil and grease.
- Do not generate and inhale liquid fertilizer aerosols.

**Section 8 Exposure Controls / Personal Protection**

**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

|                               | <b>TWA</b>                                                 | <b>STEL</b>        |
|-------------------------------|------------------------------------------------------------|--------------------|
| Product Name: PG Mix 12-14-24 | SDS Prepared by: Technical Compliance Consultants (NZ) Ltd |                    |
| Date of SDS: 10 April 2024    | Tel: 64 9 475 5240                                         | www.techcomp.co.nz |

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2023 14TH EDITION.

### Engineering Controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process acceptable levels.

### Personal Protection Equipment



|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>           | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.<br>Recommended: Tightly-fitting goggles                                                                                                                                                                                                                                  |
| <b>Hands and Skin</b> | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. 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.                                                                        |
| <b>Respiratory</b>    | Use respiratory protection with more than 94% efficiency (P2, P3 or N95) and a tight face seal, when risk of exposure to dust.                                                                                                                                                                                                                                                                                                                             |
| <b>General</b>        | Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. |

## Section 9 Physical and Chemical Properties

|                                         |               |
|-----------------------------------------|---------------|
| <b>Appearance</b>                       | Solid         |
| <b>Colour</b>                           | Not available |
| <b>Odour</b>                            | Not available |
| <b>Odour Threshold</b>                  | Not available |
| <b>pH</b>                               | Not available |
| <b>Boiling Point</b>                    | Not available |
| <b>Melting Point</b>                    | Not available |
| <b>Freezing Point</b>                   | Not available |
| <b>Flash Point</b>                      | Not available |
| <b>Flammability</b>                     | Not available |
| <b>Upper and Lower Explosive Limits</b> | Not available |
| <b>Vapour Pressure</b>                  | Not available |
| <b>Vapour Density</b>                   | Not available |
| <b>Specific Gravity</b>                 | Not available |

|                                  |               |
|----------------------------------|---------------|
| <b>Solubilities</b>              | Not available |
| <b>Partition Coefficient:</b>    | Not available |
| <b>Auto-ignition Temperature</b> | Not available |
| <b>Decomposition Temperature</b> | Not available |
| <b>Kinematic Viscosity</b>       | Not available |
| <b>Particle Size</b>             | Not available |

## Section 10. Stability and Reactivity

|                                         |                                                                                                      |
|-----------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Stability of Substance</b>           | This product is stable under normal conditions of storage and use.                                   |
| <b>Hazardous Reactions</b>              | No known hazardous reactions.                                                                        |
| <b>Conditions to Avoid</b>              | Avoid contamination by any source including metals, dust and organic materials.                      |
| <b>Incompatible Materials</b>           | alkalis<br>combustible materials<br>reducing materials<br>organic materials<br>Acids                 |
| <b>Hazardous Decomposition Products</b> | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11 Toxicological Information

### Acute Effects:

|                   |                                                                                                                                                          |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Swallowed</b>  | Not applicable. Adverse symptoms may include the following: stomach pains. reduced fetal weight. increase in fetal deaths, skeletal malformations.       |
| <b>Dermal</b>     | Not applicable.                                                                                                                                          |
| <b>Inhalation</b> | Not applicable. Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations.                      |
| <b>Eye</b>        | Not applicable. Adverse symptoms may include the following: pain or irritation, watering, redness                                                        |
| <b>Skin</b>       | Not applicable. Adverse symptoms may include the following: irritation, redness, reduced fetal weight, increase in fetal deaths, skeletal malformations. |

### Chronic Effects:

|                               |                 |
|-------------------------------|-----------------|
| <b>Carcinogenicity</b>        | Not applicable. |
| <b>Reproductive Toxicity</b>  | Not applicable. |
| <b>Germ Cell Mutagenicity</b> | Not applicable. |
| <b>Aspiration</b>             | Not applicable. |
| <b>STOT/SE</b>                | Not applicable. |
| <b>STOT/RE</b>                | Not applicable. |

### Acute toxicity

| Product/ingredient name      | Result      | Species | Dose          | Exposure        | References |
|------------------------------|-------------|---------|---------------|-----------------|------------|
| boric acid                   |             |         |               |                 |            |
|                              | LD50 Oral   | Rat     | 3,450 mg/kg   | Not applicable. | IUCLID 5   |
|                              | LD50 Dermal | Rabbit  | > 5,000 mg/kg | Not applicable. | IUCLID     |
| copper sulphate pentahydrate |             |         |               |                 |            |

|                                   |                    |     |                                    |                 |          |
|-----------------------------------|--------------------|-----|------------------------------------|-----------------|----------|
|                                   | LD50 Oral          | Rat | > 400 mg/kg<br>OECD 401            | Not applicable. | IUCLID   |
|                                   | LD50 Dermal        | Rat | > 5,000 mg/kg                      | Not applicable. | IUCLID   |
| OECD 402 applicable.              |                    |     |                                    |                 |          |
| ammonium sulphate                 |                    |     |                                    |                 |          |
|                                   | LD50 Oral          | Rat | 4,250 mg/kg<br>OECD 401            | Not applicable. | IUCLID   |
|                                   | LD50 Dermal        | Rat | > 5,000 mg/kg<br>OECD 434          | Not applicable. | IUCLID   |
| ammonium dihydrogenorthophosphate |                    |     |                                    |                 |          |
|                                   | LD50 Oral          | Rat | 2,000 - 5,000<br>mg/kg OECD<br>425 | Not applicable. | IUCLID   |
|                                   | LC50<br>Inhalation | Rat | > 5 mg/l OECD<br>403               | 4 h             | IUCLID 5 |
|                                   | LD50 Dermal        | Rat | > 5,000 mg/kg<br>OECD 402          | Not applicable. | IUCLID   |
| Potassium nitrate                 |                    |     |                                    |                 |          |
|                                   | LD50 Oral          | Rat | 2,000 - 5,000<br>mg/kg             | Not applicable. | IUCLID   |
|                                   | LD50 Dermal        | Rat | > 5,000 mg/kg                      | Not applicable. | IUCLID   |

### **Irritation/Corrosion**

| Product/ingredient name      | Result                                      | Species | Score           | Exposure | Observation     | References |
|------------------------------|---------------------------------------------|---------|-----------------|----------|-----------------|------------|
| copper sulphate pentahydrate | Skin - Erythema/Eschar OECD 404             | Rabbit  | 0.22            | 4 h      | 72 h            | IUCLID 5   |
|                              | Skin - Edema OECD 404                       | Rabbit  | 0               | 4 h      | 72 h            | IUCLID 5   |
|                              | Eyes - Cornea opacity OECD 405              | Rabbit  | 2.56            |          | 21 d            | IUCLID 5   |
|                              | Eyes - Iris lesion OECD 405                 | Rabbit  | 1               |          | 21 d            | IUCLID 5   |
|                              | Eyes - Redness of the conjunctivae OECD 405 | Rabbit  | 2               |          | 21 d            | IUCLID 5   |
|                              | Eyes - Severe irritant                      | Rabbit  | Not applicable. |          | Not applicable. |            |
| Potassium nitrate            | Skin - Non-irritating. OECD 404             | Rabbit  | 0               |          | 72 h            | IUCLID 5   |

### **Sensitization**

| Product/ingredient name      | Route of exposure | Species    | Result                      | References |
|------------------------------|-------------------|------------|-----------------------------|------------|
| copper sulphate pentahydrate | Skin              | Guinea pig | Not sensitizing<br>OECD 406 | IUCLID 5   |

### **Mutagenicity**

| Product/ingredient name      | Test     | Experiment           | Result   | References |
|------------------------------|----------|----------------------|----------|------------|
| copper sulphate pentahydrate | OECD 471 | Experiment: In vitro | Negative | IUCLID 5   |
|                              | OECD 486 | Experiment: In vivo  | Negative | IUCLID 5   |

### Reproductive toxicity

| Product/ingredient name           | Maternal toxicity        | Fertility       | Development toxin | Species               | Dose                                | Exposure              | References |
|-----------------------------------|--------------------------|-----------------|-------------------|-----------------------|-------------------------------------|-----------------------|------------|
| boric acid                        | Not applicable.          | Positive        | Not applicable.   | Rat                   | Oral                                | 3 weeks Repeated dose | IUCLID 5   |
| copper sulphate pentahydrate      | Not applicable.          | Not applicable. | Not applicable.   | Rat                   | Oral: 1000 ppm OECD 416             | Not applicable.       | IUCLID 5   |
| ammonium sulphate                 | Not applicable.          | Negative        | Negative          | Rat                   | Oral: 1500 mg/kg<br>bw/day OECD 422 | Not applicable.       | IUCLID 5   |
| ammonium dihydrogenorthophosphate | Not applicable.          | Negative        | Negative          | Rat                   | Oral: 1500 mg/kg bw/day             | Not applicable.       | IUCLID 5   |
| Potassium nitrate                 | Negative                 | Negative        | Negative          | Rat                   | Oral: > 1500 mg/kg bw/day OECD 422  | 28 days               | IUCLID 5   |
| Product/ingredient name           | Result                   | Species         | Dose              | Exposure              | References                          |                       |            |
| copper sulphate pentahydrate      | Negative - Oral OECD 414 | Rabbit          | 23.6 mg/kg        | 21 days Repeated dose | IUCLID 5                            |                       |            |

Conclusion/Summary: May damage fertility. Contains boron which may harm fertility, based on animal data. May damage the unborn child. Contains boron which may harm the unborn child, based on animal data.

### Potential chronic health effects

| Product/ingredient name           | Result                    | Species | Dose                               | Exposure               | References |
|-----------------------------------|---------------------------|---------|------------------------------------|------------------------|------------|
| copper sulphate pentahydrate      | NOAEL Feed additive. Oral | Rat     | 1,000 mg/kg Repeated dose OECD 408 | 92days 7 days per week | IUCLID 5   |
| ammonium sulphate                 | NOAEL Oral                | Rat     | 256 mg/kg                          | 365days                | IUCLID 5   |
|                                   | NOEC Inhalation           | Rat     | 0.3 mg/kg                          | 14days 8 hours per day | IUCLID 5   |
| ammonium dihydrogenorthophosphate | NOAEL Oral                | Rat     | 250 mg/kg OECD 422                 | 42days                 | IUCLID 5   |
| Potassium nitrate                 | NOAEL Oral                | Rat     | > 1,500 mg/kg                      | 28days                 | IUCLID 5   |

## Section 12. Ecotoxicological Information

Harmful to aquatic life with long lasting effects.

|                                      |                    |
|--------------------------------------|--------------------|
| <b>Persistence and degradability</b> | No data available. |
|--------------------------------------|--------------------|

|                              |                    |
|------------------------------|--------------------|
| <b>Bioaccumulation</b>       | No data available. |
| <b>Mobility in Soil</b>      | No data available. |
| <b>Other adverse effects</b> | No data available. |

### Toxicity

| Product/ingredient name           | Result                                     | Species     | Exposure | References                                |
|-----------------------------------|--------------------------------------------|-------------|----------|-------------------------------------------|
| boric acid                        |                                            |             |          |                                           |
|                                   | Acute LC50 > 100 mg/l Fresh water          | Fish        | 4 d      | IUCLID                                    |
|                                   | Acute EC50 > 100 mg/l Fresh water          | Daphnia     | 2 d      | IUCLID                                    |
| copper sulphate pentahydrate      |                                            |             |          |                                           |
|                                   | Acute LC50 0.09 mg/l                       | Fish        | 96 h     | IUCLID 5                                  |
|                                   | Acute EC50 0.0211 mg/l Fresh water         | Green algae | 4 d      | Arch.Environ.Conta m.Toxicol. 43(1):19-27 |
| ammonium sulphate                 |                                            |             |          |                                           |
|                                   | Acute EC50 169 mg/l Fresh water            | Daphnia     | 48 h     | IUCLID                                    |
|                                   | Acute EC50 1,605 mg/l Fresh water          | Algae       | 120 h    | IUCLID                                    |
| ammonium dihydrogenorthophosphate |                                            |             |          |                                           |
|                                   | Acute LC50 85.9 mg/l Fresh water OECD 203  | Fish        | 96 h     | IUCLID                                    |
|                                   | Acute LC50 1,790 mg/l Fresh water          | Water flea  | 72 h     | IUCLID                                    |
|                                   | Acute LC50 > 100 mg/l Fresh water OECD 201 | Algae       | 72 h     | IUCLID                                    |
|                                   | Chronic NOEC 100 mg/l Fresh water OECD 201 | Algae       | 72 h     | IUCLID                                    |
| Potassium nitrate                 |                                            |             |          |                                           |
|                                   | Acute LC50 1,378 mg/l Fresh water OECD 203 | Fish        | 96 h     | IUCLID 5                                  |
|                                   | Acute EC50 490 mg/l Fresh water            | Daphnia     | 48 h     | IUCLID 5                                  |
|                                   | Acute EC50 > 1,700 mg/l Fresh water        | Algae       | 240 h    | IUCLID 5                                  |

### Bioaccumulative potential

| Product/ingredient name | LogPow     | BCF             | Potential |
|-------------------------|------------|-----------------|-----------|
| boric acid              | 0.175-1.09 | Not applicable. | low       |

Do not allow to enter waterways.

## **Section 13. Disposal Considerations**

### **Disposal Method:**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material

and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty the bag by shaking to remove as much as possible of its contents. Empty bags may be disposed of as non-hazardous material or returned for recycling.

**Precautions or methods to avoid:** Avoid release to the environment.

## Section 14 Transport Information

**This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020**

## Section 15 Regulatory Information

EPA Approval Code: Fertilisers (subsidiary) – HSR002571

| HSWA & EPA Controls         | Trigger Quantity |
|-----------------------------|------------------|
| Certified Handler           | Not required     |
| Location Certificate        | Not required     |
| Tracking Trigger Quantities | Not required     |
| Signage Trigger Quantities  | 1000kg           |
| Emergency Response Plan     | 1000kg           |
| Secondary Containment       | 1000kg           |
| Restriction of Use          | None             |

## Section 16 Other Information

### Glossary

|                  |                                                                                         |
|------------------|-----------------------------------------------------------------------------------------|
| EC <sub>50</sub> | Median effective concentration.                                                         |
| EEL              | Environmental Exposure Limit.                                                           |
| EPA              | Environmental Protection Authority                                                      |
| HSNO             | Hazardous Substances and New Organisms.                                                 |
| LC <sub>50</sub> | Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it. |
| LD <sub>50</sub> | Lethal dose to kill 50% of test animals/organisms.                                      |
| LEL              | Lower explosive level.                                                                  |
| OSHA             | American Occupational Safety and Health Administration.                                 |
| TEL              | Tolerable Exposure Limit.                                                               |
| TLV              | Threshold Limit Value-an exposure limit set by responsible authority.                   |
| UEL              | Upper Explosive Level                                                                   |
| WES              | Workplace Exposure Limit                                                                |

### References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2023 14th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

### Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness.

As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the New Zealand distributor, if further information is required.

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