

# SAFETY DATA SHEET

PRODUCT NAME **Imtrade Commander Cereal Herbicide**  
 APVMA Product Code: 59473

## 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Supplier Name** **IMTRADE AUSTRALIA PTY LTD**  
**Address** 17 Ocean Street, Kwinana, Western Australia, AUSTRALIA, 6167  
**Telephone** 1800 171 799  
**Fax** 1800 171 788  
**Emergency** In a Transport Emergency Dial 000 – Police or Fire Brigade  
**Web site** <http://www.imtrade.com.au>  
**Product Use:** Agricultural herbicide for use as described on the product label.  
**Creation Date:** **March, 2008**  
**This version issued:** **October, 2022** and is valid for 5 years from this date.  
**Product type:** MCPA is an aryloxyalkanoic acid derivative; Picloram is a pyridinecarboxylic acid derivative.

## SECTION 2 - HAZARDS IDENTIFICATION

### Statement of Hazardous Nature

**SUSMP Classification:** S5

**ADG Classification:** Class 9: Miscellaneous Dangerous Goods.

**UN Number:** 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains MCPA).



### GHS Signal word: **WARNING**

Acute Toxicity Oral - Category 4  
 Acute Toxicity Dermal - Category 4  
 Skin Corrosion /Irritation - Category 2  
 Serious Eye Damage/Eye Irritation - Category 2/2A  
 Acute Toxicity Inhalation - Category 4  
 Hazardous to Aquatic Environment Short Term/Chronic - Category 1

### **HAZARD STATEMENTS:**

H302: Harmful if swallowed.  
 H312: Harmful in contact with skin.  
 H315: Causes skin irritation.  
 H319: Causes serious eye irritation.  
 H332: Harmful if inhaled.  
 H410: Very toxic to aquatic life with long lasting effects.

### **PRECAUTIONARY STATEMENTS:**

#### **PREVENTION**

P102: Keep out of reach of children.  
 P261: Avoid breathing fumes, mists, vapours or spray.  
 P262: Do not get in eyes, on skin, or on clothing.  
 P264: Wash contacted areas thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.  
 P271: Use only outdoors or in a well ventilated area.  
 P280: Wear protective gloves, protective clothing and eye or face protection.

#### **RESPONSE**

P362: Take off contaminated clothing and wash before reuse.  
 P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.  
 P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.

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P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical advice.

P337+P313: If eye irritation persists: Get medical advice.

P370+P378: Not combustible. Use extinguishing media suited to burning materials.

**STORAGE**

P410: Protect from sunlight.

P402+P404: Store in a dry place. Store in a closed container.

P403+P235: Store in a well-ventilated place. Keep cool.

**DISPOSAL**

P501: Dispose of contents and containers as specified on the registered label.

**Emergency Overview**

**Physical Description & Colour:** Brown to black liquid.

**Odour:** Mild odour.

**Major Health Hazards:** Symptoms in humans from very high acute exposure could include slurred speech, twitching, jerking and spasms, drooling, low blood pressure, and unconsciousness. May cause serious damage to eyes, harmful by inhalation, in contact with skin, and if swallowed, skin irritant.

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredients	CAS No	Conc, %	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
MCPA, as potassium salt	5221-16-9	420g/L*	not set	not set
Picloram, as potassium salt	2545-60-0	26g/L*	not set	not set
Other non hazardous ingredients	secret	to 100	not set	not set

\* The values shown are for the parent acids. The salts are present at a somewhat higher concentration.

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

**SECTION 4 - FIRST AID MEASURES****General Information:**

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

**Inhalation:** If symptoms of poisoning become evident, contact a Poisons Information Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

**Skin Contact:** Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.

**Eye Contact:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

**SECTION 5 - FIRE FIGHTING MEASURES**

**Fire and Explosion Hazards:** There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

This product is likely to decompose only after heating to dryness, followed by further strong heating.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** Not Combustible. Use extinguishing media suited to burning materials.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

**Flammability Class:** Does not burn.

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

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**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective chemically resistant clothing including eye/face protection, gauntlets and self contained breathing apparatus. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). Otherwise, not normally necessary.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

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**SECTION 7 - HANDLING AND STORAGE**

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**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

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**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501** set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

**SWA Exposure Limits****TWA (mg/m<sup>3</sup>)****STEL (mg/m<sup>3</sup>)**

Exposure limits have not been established by SWA for any of the significant ingredients in this product.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

**Eye Protection:** Protective glasses or goggles must be worn when this product is being used. Failure to protect your eyes may lead to severe harm to them or to general health. Emergency eye wash facilities must also be available in an area close to where this product is being used.

**Skin Protection:** Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

**Protective Material Types:** Suitable materials for protective clothing include rubber, PVC.

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

Eyebaths or eyewash stations and safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES:**

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**Physical Description & colour:** Brown to black liquid.

**Odour:** Mild odour.

**Boiling Point:** Approximately 100°C at 100kPa.

**Flash point:** Does not burn.

**Upper Flammability Limit:** Does not burn.

**Lower Flammability Limit:** Does not burn.

**Autoignition temperature:** Not applicable - does not burn.

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<b>Freezing/Melting Point:</b>	Approximately 0°C.
<b>Volatiles:</b>	Water component.
<b>Vapour Pressure:</b>	2.37 kPa at 20°C (water vapour pressure).
<b>Vapour Density:</b>	No data.
<b>Specific Gravity:</b>	1.21 at 20°C
<b>Water Solubility:</b>	Completely soluble in water.
<b>pH:</b>	9 to 11 (as supplied)
<b>Volatility:</b>	No data.
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	No data.
<b>Coeff Oil/water Distribution:</b>	No data
<b>Particle Characteristics:</b>	Not applicable to liquids.

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## SECTION 10 – STABILITY AND REACTIVITY

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**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** strong acids, strong bases, strong oxidising agents.

**Fire Decomposition:** This product is likely to decompose only after heating to dryness, followed by further strong heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Hydrogen chloride gas, other compounds of chlorine. Water, potassium compounds. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

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

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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**Toxicity:** An information profile for MCPA is available at <http://extoxnet.orst.edu/pips/ghindex.html>

**Acute toxicity:** MCPA acid is harmful via ingestion, with reported oral LD<sub>50</sub> values for the technical product in rats ranging from 700 mg/kg to 1160 mg/kg and ranging in mice from 550 to 800 mg/kg. It is harmful via the dermal route as well, with reported dermal LD<sub>50</sub> values ranging from greater than 1000 mg/kg in rats to greater than 4000 mg/kg in rabbits.

**Chronic toxicity:** Dietary levels of approximately 50 mg/kg/day and 125 mg/kg/day over 7 months caused reduced feeding rates and retarded growth rates in rats. White blood cell counts and ratios were not affected, but some reductions in red blood cell counts and haemoglobin did appear to be associated with exposure to MCPA at oral dose levels of approximately 20 mg/kg/day. In the same study, oral doses of approximately 5 mg/kg/day caused increased relative kidney weights, and oral doses of approximately 20 mg/kg/day caused increased relative liver weights. Another study in rats showed no effects on kidney or liver weights over an unspecified period at oral doses of 60 mg/kg/day, but oral doses of 150 mg/kg/day did cause reversible increases in these weights over a course of 3 months. Very high dermal doses of 500 mg/kg/day caused reduced body weight, and even higher dermal doses of 1000 and 2000 mg/kg/day resulted in increased mortality and observable changes in liver, kidney, spleen, and thymus tissue.

**Reproductive effects:** A two-generation rat study at doses of up to 15 mg/kg/day affected reproductive function. It is unlikely that humans will experience these effects under normal exposure conditions.

**Teratogenic effects:** Offspring of pregnant rats fed low to moderate doses of MCPA (20 to 125 mg/kg) on days 6 to 15 of gestation, had no birth defects. Teratogenic effects in humans are unlikely at expected exposure levels.

**Mutagenic effects:** MCPA is reportedly weakly mutagenic to bone marrow and ovarian cells of hamsters, but negative results were reported for other mutagenic tests. It appears that the compound poses little or no mutagenic risk.

**Carcinogenic effects:** All of the available evidence on MCPA indicates that the compound does not cause cancer. Forestry and agricultural workers occupationally exposed to MCPA in Sweden did not show increased cancer incidence.

**Organ toxicity:** Target organs identified in animal studies include the liver, kidneys, spleen, and thymus. Farm worker exposure has resulted in reversible anaemia, muscular weakness, digestive problems, and slight liver damage.

**Fate in humans and animals:** MCPA is rapidly absorbed and eliminated from mammalian systems. Rats eliminated nearly all of a single oral dose within 24 hours, mostly through urine with little or no metabolism. Humans excreted about half of a 5 mg dose in the urine within a few days. No residues were found after day 5.

Picloram did not cause cancer in laboratory animals. Picloram did not cause birth defects or other effects in the foetus even at doses which caused toxic effects in the mother.

The preponderance of data shows Picloram to be non-mutagenic in in-vitro (test tube) tests and in animal test systems.

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**Organ toxicity:** Animal studies show the target organs for Picloram to be the liver and kidneys.

**Fate in humans and animals:** Picloram was rapidly absorbed through the gastrointestinal tract in studies using human volunteers, and was excreted unchanged in the urine. Half of the product was excreted within a day or so. Skin absorption is minimal. Rats showed similar results, with administered doses excreted virtually unchanged in urine and faeces within 48 hours.

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### Classification of Hazardous Ingredients

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Ingredient	Health Hazard Statement Codes
<b>MCPA, salts and esters of</b>	H332, H312, H302, H410
<ul style="list-style-type: none"><li>• Acute Toxicity – Category 4</li><li>• Acute Toxicity – Category 4</li><li>• Acute Toxicity – Category 4</li><li>• Hazardous to the Aquatic Environment (Acute) – Category 1</li><li>• Hazardous to the Aquatic Environment (Chronic) – Category 1</li></ul>	

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### Potential Health Effects

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#### Inhalation:

**Short Term Exposure:** Available data shows that this product is harmful, see symptoms above. In addition product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure:** No data for health effects associated with long term inhalation.

#### Skin Contact:

**Short Term Exposure:** Available data shows that this product is harmful, see symptoms above. In addition product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.

**Long Term Exposure:** No data for health effects associated with long term skin exposure.

#### Eye Contact:

**Short Term Exposure:** This product is a severe eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms such as swelling of eyelids and blurred vision may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment is likely to cause permanent damage.

**Long Term Exposure:** No data for health effects associated with long term eye exposure.

#### Ingestion:

**Short Term Exposure:** Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, see symptoms above. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.

**Long Term Exposure:** No data for health effects associated with long term ingestion.

#### Carcinogen Status:

**SWA:** No significant ingredient is classified as carcinogenic by SWA.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** No significant ingredient is classified as carcinogenic by IARC.

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### Section 12 - Ecological Information

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This product may be considered to be biodegradable. It will not accumulate in the soil or water or cause long term problems. Note that Picloram is not considered to be readily biodegradable. However, it is unclear if this extends to the potassium salt.

**Effects on birds:** MCPA is moderately toxic to wildfowl; the LD<sub>50</sub> of MCPA in bobwhite quail is 377 mg/kg.

**Effects on aquatic organisms:** MCPA is only slightly toxic to freshwater fish, with reported LC<sub>50</sub> values ranging from 117 to 232 mg/L in rainbow trout. MCPA is practically nontoxic to freshwater invertebrates, and estuarine and marine organisms.

**Effects on other organisms:** It is nontoxic to bees, with a reported oral LD<sub>50</sub> of 104µg/bee.

#### Environmental Fate:

**Breakdown in soil and groundwater:** MCPA and its formulations are rapidly degraded by soil microorganisms and it has low persistence, with a reported field half-life of 14 days to 1 month, depending on soil moisture and soil organic matter. MCPA and its formulations show little affinity for soil.

**Breakdown in water:** It is relatively stable to light breakdown, but can be rapidly broken down by microorganisms. In rice paddy water, MCPA is almost totally degraded by aquatic microorganisms in under 2 weeks.

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**Breakdown in vegetation:** MCPA is readily absorbed and translocated in most plants. It is actively broken down in plants, the major metabolite being 2-methyl-4-chlorophenol.

#### Picloram:

**Effects on aquatic organisms:** Picloram is slightly to moderately toxic to fish and aquatic invertebrates. The 48-hour LC<sub>50</sub> in Daphnia is 50mg/L, indicating moderate toxicity. Most salts are of similar or lesser toxicity. Other LC<sub>50</sub> values in aquatic invertebrates ranged from 10 to 68mg/L. Picloram is not expected to accumulate appreciably in aquatic organisms; the measured bioconcentration factor in bluegill sunfish was less than 0.54.

**Breakdown in soil and groundwater:** Picloram is moderately to highly persistent in the soil environment, with reported field half-lives from 20 to 300 days and an estimated average of 90 days. Photodegradation is significant only on the soil surface and volatilization is practically nil.

**Breakdown in water:** In laboratory studies, sunlight readily broke down Picloram in water, with a half-life of 2.6 days. Herbicide levels in farm ponds were 1mg/L directly following spraying, and decreased to 0.01mg/L within 100 days, primarily due to dilution and the action of sunlight.

**Breakdown in vegetation:** Picloram is readily absorbed by plant roots, less so by the foliage, and is readily translocated throughout plants. It remains stable and intact in plants.

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### SECTION 13 - DISPOSAL CONSIDERATIONS

**Disposal:** Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

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### SECTION 14 - TRANSPORT INFORMATION

**Not subject to the ADG Code when transported by Road or Rail in Australia, in packages 500kg(L) or less; or IBCs, but classed as Dangerous by IATA and IMSBC when carried by Air or Sea transport (see details below).**

**UN Number:** 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains MCPA).

**Hazchem Code:** •3Z

**Special Provisions:** 179, 274, AU01

**Limited quantities:** ADG 7 specifies a Limited Quantity value of 5 L for this class of product.

**Dangerous Goods Class:** Class 9: Miscellaneous Dangerous Goods.

**Packaging Group:** III

**Packaging Method:** P001, IBC03, LP01

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**Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight**

### SECTION 15 - REGULATORY INFORMATION

**AIIIC:** All of the significant ingredients in this formulation are compliant with AICIS regulations. The following ingredient; MCPA is mentioned in the SUSMP.

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### SECTION 16 - OTHER INFORMATION

**This SDS contains only safety-related information. For other data see product literature.**

#### Acronyms:

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 <sup>th</sup> edition)
<b>AIIIC</b>	Australian Inventory of Industrial Chemicals
<b>SWA</b>	Safe Work Australia, formerly ASCC and NOHSC
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>SUSMP</b>	Standard for the Uniform Scheduling of Medicines & Poisons
<b>UN Number</b>	United Nations Number

This SDS summarises our best knowledge of the health and safety hazard information on the product, and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact Imtrade Australia Pty Ltd, or in the event of an emergency, 000. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

### SAFETY DATA SHEET

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (July 2020) and GHS Revision 7

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End of Report

## **SAFETY DATA SHEET**