

SDS no. XR5BU8GJ • Version 1.0 • Date of issue: 2025-02-05

## **SECTION 1: Identification**

## **GHS Product identifier**

Product name

ARSENIC TRIOXIDE

### Recommended use of the chemical and restrictions on use

Pigments, ceramic enamels, aniline colours, decolourising agent in glass, rodenticide, insecticide, herbicide, sheep and cattle dip, hide preservative, wood preservative, preparation of other arsenic compounds and laboratory reagent.

#### Supplier's details

Name Address	ChemSupply Australia Pty Ltd 38-50 Bedford Street 5013 Gillman South Australia Australia	
Telephone email <b>Emergency phone number</b>	08 8440 2000 www.chemsupply.com.au	

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

## **SECTION 2: Hazard identification**

#### **General hazard statement**

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

### Classification of the substance or mixture

#### GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, oral, Cat. 2
- Acute toxicity, inhalation, Cat. 3
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic), Cat. 1
- Carcinogenicity, Cat. 1A
- Germ cell mutagenicity, Cat. 2
- Skin corrosion/irritation, Cat. 1B
- Specific target organ toxicity following repeated exposure, Cat. 1

### **GHS** label elements, including precautionary statements

#### Pictograms



Signal v	vord
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Danger

Hazard statement(s)	
H300	Fatal if swallowed
H314	Causes severe skin burns and eye damage
H331	Toxic if inhaled
H341	Suspected of causing genetic defects
H350	May cause cancer
H372	Causes damage to organs [organs] through prolonged or repeated exposure [route]
H410	Very toxic to aquatic life with long lasting effects
Precautionary statement(s)	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physcian
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep 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.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor/physcian
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal facility

# **SECTION 3: Composition/information on ingredients**

## Mixtures

Molecular weight: 197.84

## Components

Component	CAS no.	Concentration
ARSENIC TRIOXIDE (EC no.: 215-481-4; Index no.: 033-003-00-0)	1327-53-3	<= 100 % (weight)
CLASSIFICATIONS: Acute toxicity, inhalation, Cat. 3; Acute toxicity, oral, Cat. 2; Carcinogenicity, Cat. 1A; Germ cell mutagenicity, Cat. 2; Hazardous to the aquatic		
environment, long-term (chronic), Cat. 1; Hazardous to the aquatic environment, short-term (acute), Cat. 1; Skin corrosion/irritation, Cat. 1B; Specific target organ		
toxicity following repeated exposure, Cat. 1. HAZARDS: H300 - Fatal if swallowed; H314 - Causes severe skin burns and eye damage; H331 - Toxic if inhaled; H341 -		
Suspected of causing genetic defects [route]; H350 - May cause cancer [route]; H372 - Causes damage to organs [organs] through prolonged or repeated exposure		
[route]; H400 - Very toxic to aquatic life; H410 - Very toxic to aquatic life with long lasting effects.		

## **SECTION 4: First-aid measures**

#### **Description of necessary first-aid measures**

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor (at once).
	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately, avoid becoming a casualty. Make patient comfortable, keep warm and at rest until fully recovered. If breathing is difficult (or develops a
	bluish skin discolouration), supply oxygen by a qualified person. Apply artificial respiration with a
	respiratory medical device if not breathing. Do not use mouth to mouth resuscitation. Immediately
	medical attention is required
In case of skin contact	Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. Seek medical attention.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek medical attention.
If swallowed	Rinse mouth thoroughly with water immediately. DO NOT INDUCE VOMITING. Seek immediate medical advice.

#### Most important symptoms/effects, acute and delayed

Exposure to arsenic compounds can cause burning and dryness of the oral and nasal cavities, muscle spasms, irritation of the gastrointestinal tract, nausea, vomiting, and diarrhea, which can progress to shock and death.

#### Indication of immediate medical attention and special treatment needed, if necessary

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

## **SECTION 5: Fire-fighting measures**

### Suitable extinguishing media

Small fire: Use dry chemical, CO2 or water spray. If safe to do so, move undamaged containers from fire area. Large fire: Use water spray, fog or foam - Do not use water jets. Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.

#### Specific hazards arising from the chemical

Hazards from Combustion Products: May librate toxic fumes in fire including arsenic compounds and oxides.

Specific hazards arising from the chemical: Material does not burn. Fire or heat will produce irritating, poisonous and/or corrosive gases. Runoff may pollute waterways.

#### Special protective actions for fire-fighters

Wear SCBA and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for these materials.

## **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

Evacuate the area of all non-essential personnel. Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms. Wear protective clothing specified for normal operations (see Section 8)

#### Methods and materials for containment and cleaning up

Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if safe to do so DO NOT GET WATER INSIDE CONTAINERS. SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL. Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

## **SECTION 7: Handling and storage**

#### Precautions for safe handling

Avoid generation or accumulation of dusts. Avoid exposure - obtain special instructions before use In case of insufficient ventilation, wear suitable respiratory equipment. Avoid prolonged or repeated contact with skin, eyes and clothing . Wash hands and face thoroughly after working with material. Use local exhaust extraction.

#### Conditions for safe storage, including any incompatibilities

Store in a cool,dry place. Keep containers closed at all times. Store away from acids. Store away from heat. Store away from foodstuffs. Keep locked up

Prevent any possibility of contact with this product. Pay strict attention to hygiene precautions when working with a carcinogen.

### SECTION 8: Exposure controls/personal protection

#### Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

#### Individual protection measures, such as personal protective equipment (PPE)

#### **Eye/face protection**

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

#### Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

#### **Body protection**

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear -Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with and apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

#### **Respiratory protection**

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

## **SECTION 9: Physical and chemical properties**

### **Basic physical and chemical properties**

Physical state Appearance Color Odor Odor threshold Melting point/freezing point Boiling point or initial boiling point and boiling range Flammability Lower and upper explosion limit/flammability limit Flash point Explosive properties Auto-ignition temperature Decomposition temperature Oxidizing properties pН Kinematic viscosity Solubility

Partition coefficient n-octanol/water (log value) Vapor pressure Evaporation rate Density and/or relative density Relative vapor density Particle characteristics

Supplemental information regarding physical hazard classes No data available.

**Further safety characteristics (supplemental)** Other Information: Taste: Tasteless.

## **SECTION 10: Stability and reactivity**

#### Reactivity

Stable under normal conditions of storage and handling.

#### **Chemical stability**

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

Solid White to beige powder. No data available. Odourless. No data available. 312.3 °C 457.2 - 465 °C No data available. Solubility in Water: Soluble (21 g/L @ 20 °C) Solubility in Organic Solvents: Soluble in acids, alkalies and glycerin. Practically insoluble in alcohol, chloroform and ether. No data available. No data available. No data available. Specific Gravity: 3.74 No data available. No data available.

Hazardous Polymerization: Will not occur.

#### **Conditions to avoid**

Moisture. Dust generation. Incompatibles. Excess heat.

#### Incompatible materials

Strong oxidizing agents, metals, tannic acid, infusion cinchona and other vegetable astringent infusions and decoctions and iron in solution.

#### Hazardous decomposition products

May librate toxic fumes in fire including arsenic compounds and oxides.

## **SECTION 11: Toxicological information**

#### Information on toxicological effects

#### Acute toxicity

Acute Toxicity - Oral: LD50 (rat): 14.6 mg/kg.

Ingestion: Very toxic, may be fatal if swallowed. Causes severe digestive tract irrition. Symptoms include of nausea, vomiting, headache, dizziness, chills, cramps, irritability and variable paralysis which may progress over a period of several weeks. Large amounts may cause severe haemorrhagic gastritis or gastroenteritis, burning oesophageal pain, vomiting, convulsions, coma and death. The effects on the gastrointestinal tract do not occur immediately, but are delayed from several minutes to a few hours. Later effects include cold and clamy skin, fall in blood pressure and weakness.

Inhalation: Toxic if inhaled. Material is extremely destructive to the mucous membranes and upper respiratory tract. Symptoms may include respiratory irritation, pulmonary edema, cyanosis, coughing, restlessness and difficult or laboured breathing. May cause allergic respiratory reaction.

// ----- From the Suggestion report (09/01/2025, 10:29 AM) ----- // The ATE (oral) of the mixture is: 5 mg/kg bw

// ----- From the Suggestion report (09/01/2025, 10:39 AM) ----- // The ATE (dusts-mists inhalation) of the mixture is: 0.5 mg/l

- // ----- From the Suggestion report (09/01/2025, 10:39 AM) ----- // The ATE (gas inhalation) of the mixture is: 700 ppmV
- // ----- From the Suggestion report (09/01/2025, 10:39 AM) ----- // The ATE (oral) of the mixture is: 5 mg/kg bw

#### Skin corrosion/irritation

Causes burns and may cause skin irritation.

#### Serious eye damage/irritation

Causes burns. May cause eye irritation, corneal burns and conjunctivitis.

### Respiratory or skin sensitization

Not classified based on available information.

#### Germ cell mutagenicity

Germ cell mutagenicity: Germ Cell Mutagenicity: Category 2 H341 Suspected of causing genetic defects.

#### Carcinogenicity

Arsenic compounds (NB: This evaluation applies to the group of compounds as a whole and not necessarily to all individual compounds within the group) is evaluated in the IARC Monographs (Vol. 23, Suppl. 7;1987) as Group 1: Carcinogenic to humans.

#### **Reproductive toxicity**

Not classified based on available information.

### Specific target organ toxicity (STOT) - single exposure

Not classified based on available information.

#### Specific target organ toxicity (STOT) - repeated exposure

Specific Target Organ Toxicity - Repeated Exposure Category 1 H372 Causes damage to organs through prolonged or repeated exposure.

#### **Aspiration hazard**

Not classified based on available information.

#### **Additional information**

Chronic Effects: Repeated or prolonged skin contact may cause chronic dermatitis with symptoms including cracking, thickening, pigmentation and skin drying. Prolonged exposure to arsenic compounds can cause exfoliation and pigmentation of skin, herpes, inflammation of nerves, and nasal septum ulceration. Dry mouth, a metallic taste, drowsiness, loss of appetite, excessive salivation, nausea, vomiting and a foul, garlic-like breath.

## **SECTION 12: Ecological information**

#### Toxicity

Acute Toxicity - Fish: LC50 (Oncohynchus mykiss - rainbow trout): >1000 mg/l/96h

Acute Toxicity - Daphnia: EC50 (Daphnia magna - Water flea): 8.23 mg/l/24h

#### **Bioaccumulative potential**

Bioconcentration factor (Lepomis cynaellus): 236

#### Mobility in soil

Highly mobilein all environments due to water solubility.

## **SECTION 13: Disposal considerations**

#### **Disposal methods**

#### **Product disposal**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

#### **Packaging disposal**

Dispose of containers/packaging as hazardous waste.

#### Sewage disposal

Bioconcentration factor (Lepomis cynaellus): 236

#### Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

## **SECTION 14: Transport information**

## ADG (Road and Rail)

UN Number: 1561 Class: 6.1 Packing Group: II Proper Shipping Name: ARSENIC TRIOXIDE

Hazchem emergency action code (EAC) 2X

## IMDG

UN Number: 1561 Class: 6.1 Packing Group: II EMS Number: Proper Shipping Name: ARSENIC TRIOXIDE

## IATA

UN Number: 1561 Class: 6.1 Packing Group: II Proper Shipping Name: ARSENIC TRIOXIDE

## **SECTION 15: Regulatory information**

## Safety, health and environmental regulations specific for the product in question

Australia SUSMP Poison Schedule: S7

## **SECTION 16: Other information**

## Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

## **Preparation information**

All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. ChemSupply Australia Pty Ltd accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.

Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.' Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020. Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020. Safe Work Australia, Workplace Exposure Standards for Airbourne Contaminants, December 2019 Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)