

Revision Date 23-Aug-2022

Version 16

## Section 1: Identification

### Product identifier

**Product Name** Armour

**Product Code** A-0924

### Other means of identification

**Pure substance/mixture** Mixture

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

**Recommended Use** Swimming pool chemical.

**Uses advised against** Do not mix with other chemicals.

### Details of manufacturer or importer

#### Supplier

BIOLAB AUSTRALIA PTY LTD  
1 Susan Street  
Hindmarsh SA 5007  
AUSTRALIA  
PHONE: (AU) 1800 635 743

### For further information, please contact

**Contact Point** Customer Service: 0 800 441 662 (NZ)  
Customer Service: 1800 635 743 (AU)

**E-mail address** BiolabAU@biolabinc.com

### Emergency telephone number

**Emergency telephone number** In an Emergency: Dial 000 (AU)  
For SPECIALIST advice in an EMERGENCY ONLY phone CHEMCALL - FREE CALL ALL  
HOURS: AU 1800 127 406

## Section 2: Hazard(s) identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS)

### GHS Classification

<b>Acute toxicity - Oral</b>	Category 4
<b>Acute toxicity - Inhalation (Dusts/Mists)</b>	Category 4
<b>Serious eye damage/eye irritation</b>	Category 2
<b>Specific target organ toxicity (single exposure)</b>	Category 3

### Label elements

**Signal word**

DANGER

**Hazard statements**

Harmful if swallowed  
 Causes serious eye irritation  
 May cause respiratory irritation  
 May be harmful if inhaled  
 Contact with acids liberates toxic gas

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapours/spray  
 Use only outdoors or in a well-ventilated area  
 Wear respiratory protection  
 Wear eye/face protection

**Precautionary Statements - Response**

Specific treatment is urgent (see .? on this label)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 Immediately call a doctor  
 Call a doctor if you feel unwell  
 IF SWALLOWED: Call a POISONS CENTRE or doctor if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards which do not result in classification**

May be harmful in contact with skin.

### Section 3: Composition and information on ingredients

Chemical name	CAS No	Weight-%
Sodium Dichloro-S-Triazinetrione	2893-78-9	>60
Non-hazardous ingredients	Proprietary	Balance

### Section 4: First aid measures

**Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Inhalation**

If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not breathe dust. 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. If breathing is

	difficult, (trained personnel should) give oxygen. IF exposed or concerned: Get medical advice/attention.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash skin with soap and water.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor or poisons information centre immediately.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. 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. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

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

<b>Symptoms</b>	Coughing and/or wheezing. Difficulty in breathing. May cause redness and tearing of the eyes. Burning sensation.
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#### **Indication of any immediate medical attention and special treatment needed**

<b>Note to doctors</b>	Treat symptomatically.
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### **Section 5: Firefighting measures**

#### **Suitable Extinguishing Media**

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
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<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
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#### **Specific hazards arising from the chemical**

<b>Specific hazards arising from the chemical</b>	No information available.
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#### **Special protective actions for firefighters**

<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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### **Section 6: Accidental release measures**

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

<b>Personal precautions</b>	Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
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<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.
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<b>For emergency responders</b>	Use personal protection recommended in Section 8.
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**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Precautions to prevent secondary hazards**

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Section 7: Handling and storage****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before re-use. Avoid breathing vapours or mists.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Do not breathe dust. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before re-use. Contaminated work clothing must not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

**Incompatible materials** None known based on information supplied.

**Section 8: Exposure controls and personal protection****Control parameters**

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

**Appropriate engineering controls**

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** If splashes are likely to occur, wear safety glasses with side-shields.

**Skin and body protection** Wear suitable protective clothing.

**Hand protection** Wear suitable gloves.

<b>Respiratory protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
<b>Environmental exposure controls</b>	No information available.
<b>Thermal hazards</b>	No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Solid
<b>Appearance</b>	granules
<b>Colour</b>	white
<b>Odour</b>	faint halogen.
<b>Odour threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	4.5	Saturated aqueous solution
<b>Melting point / freezing point</b>	240 °C	Decomposes
<b>Boiling point/boiling range</b>	No data available	None known
<b>Flash point</b>	No data available	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>		None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapour pressure</b>	No data available	None known
<b>Vapour density</b>	No data available	None known
<b>Relative density</b>		None known
<b>Water solubility</b>	No data available 250 g/L	
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Auto-ignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>	No information available	None known
<b>Kinematic viscosity</b>		None known
<b>Dynamic viscosity</b>	No data available	None known
<b>Explosive properties</b>	No information available	
<b>Oxidising properties</b>	No information available	

### Other information

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content</b>	No information available
<b>Density</b>	0.90 - 0.93 g/cm <sup>3</sup>
<b>Bulk density</b>	No information available
<b>Particle characteristics</b>	No information available

## Section 10: Stability and reactivity

### Reactivity

<b>Reactivity</b>	Do not mix with other chemicals. Do not mix with different types of chlorinating chemicals. Do not allow contact with combustible material such as paper, fabric, saw dust and kerosene. May explode with combustibles.
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### Chemical stability

<b>Stability</b>	Stable under normal conditions.
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### Explosion data

**Sensitivity to mechanical impact** None.  
**Sensitivity to static discharge** None.

#### Possibility of hazardous reactions

**Possibility of hazardous reactions** None under normal processing.

#### Conditions to avoid

**Conditions to avoid** Excessive heat.

#### Incompatible materials

**Incompatible materials** None known based on information supplied.

#### Hazardous decomposition products

**Hazardous Decomposition Products** Halogen containing gases. Carbon oxides. Chlorine gas. Bromine gas.

### **Section 11: Toxicological information**

#### Acute toxicity

#### Information on likely routes of exposure

#### **Product Information**

<b>Inhalation</b>	Irritating to respiratory system. Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components). May cause irritation of respiratory tract.
<b>Eye contact</b>	Risk of serious damage to eyes. Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	Irritating to skin. Contact with moist skin may cause skin burns. Causes burns. May be harmful in contact with skin. Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation. May be harmful in contact with skin.
<b>Ingestion</b>	Harmful if swallowed. Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Harmful if swallowed. (based on components).
<b>Symptoms</b>	Coughing and/or wheezing. Difficulty in breathing. May cause redness and tearing of the eyes.

#### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	500.00 mg/kg
<b>ATEmix (dermal)</b>	4,081.60 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	0.270 mg/l

#### **Unknown acute toxicity**

15 % of the mixture consists of ingredient(s) of unknown acute oral toxicity  
 15 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Dichloro-S-Triazinetrione	= 1823 mg/kg ( Rat )	> 5000 mg/kg ( Rat )	0.27 - 1.17 mg/L ( Rat, dust ) 4 h

See section 16 for terms and abbreviations

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	May cause skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitisation</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	May cause respiratory irritation.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**Section 12: Ecological information****Ecotoxicity****Aquatic ecotoxicity**

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium Dichloro-S-Triazinetrione	-	LC50: 0.13 - 0.36mg/L (96h, Oncorhynchus mykiss) LC50: 0.176 - 0.267mg/L (96h, Oncorhynchus mykiss) LC50: 0.207 - 0.389mg/L (96h, Lepomis macrochirus) LC50: 0.25 - 1mg/L (96h, Lepomis macrochirus) LC50: =0.29mg/L (96h, Oncorhynchus mykiss)	-	EC50: 0.00018 - 0.00021mg/L (48h, Daphnia magna) EC50: 0.093 - 0.16mg/L (48h, Daphnia magna)

**Terrestrial ecotoxicity** There is no data for this product.

**Persistence and degradability**

**Persistence and degradability** No information available.

#### Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

#### Mobility

**Mobility** No information available.

#### Other adverse effects

**Other adverse effects** No information available.

### Section 13: Disposal considerations

#### Waste treatment methods

**Waste from residues/unused products** Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

**Contaminated packaging** Do not re-use empty containers.

See section 8 for more information

### Section 14: Transport information

**Note:** Limited quantity (LQ) exception is possible

#### ADG

**UN Number** UN1759  
**Proper shipping name** Corrosive solids, n.o.s. (Sodium dichloro-s-triazinetriene)  
**Transport hazard class(es)** 8  
**Packing Group** III

#### IATA

**UN number or ID number** UN1759  
**Proper shipping name** Corrosive solid, n.o.s. (Sodium dichloro-s-triazinetriene)  
**Transport hazard class(es)** 8  
**Packing group** III  
**Description** UN1759, Corrosive solids, n.o.s. (Sodium dichloro-s-triazinetriene), 8, III

#### IMDG

**UN number or ID number** UN1759  
**Proper shipping name** Corrosive solid, n.o.s. (Sodium dichloro-s-triazinetriene)  
**Transport hazard class(es)** 8  
**Packing Group** III  
**EmS-No** F-A. S-B  
**Description** UN1759, Corrosive solids, n.o.s. (Sodium dichloro-s-triazinetriene), 8, III

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

No information available

### Section 15: Regulatory information

#### Regulatory information

**National regulations****Australia**

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
See section 8 for national exposure control parameters

**Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)**

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

**Poison Schedule Number** 6

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Sodium Dichloro-S-Triazinetrione - 2893-78-9	Present	-

**Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

**Major hazard (accident/incident planning) regulation**

Verify that license requirements are met

Hazardous chemical

Materials that meet the criteria for Toxic in table 15.3

Threshold quantity (T)  
200

**International Inventories**

<b>AICS</b>	Complies.
<b>NZIoC</b>	Complies.
<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.

**Legend:**

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**Section 16: Other information****Revision Date** 23-Aug-2022**Revision Note**

\*\*\*Indicates updated data since last publication.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Program  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text**

**End of Safety Data Sheet**