

Revision Date 29-Aug-2023

Version 17

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

Oxidising solids	Category 2
Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 1

Label elements**Signal word**

DANGER

Hazard statements

May intensify fire; oxidiser
 Harmful if swallowed
 Causes serious eye irritation
 May cause respiratory irritation
 May be harmful if inhaled
 Causes skin irritation
 Very toxic to aquatic life
 Contact with acids liberates toxic gas

Precautionary Statements - Prevention

Read carefully and follow all instructions
 Wear eye/face protection
 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
 Avoid release to the environment
 Take any precaution to avoid mixing with combustibles

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 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 ON SKIN: Wash with plenty of water
 If skin irritation occurs: Get medical advice/attention
 Take off contaminated clothing and wash before re-use
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Immediately call a POISONS INFORMATION CENTRE or doctor
 Call a POISONS INFORMATION CENTRE or doctor if you feel unwell
 IF SWALLOWED: Call a POISONS CENTRE or doctor if you feel unwell
 Rinse mouth
 Collect spillage

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.
Eye contact	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.
Skin contact	Wash skin with soap and water.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor or poisons information centre immediately.
Self-protection of the first aider	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

Symptoms	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

Note to doctors	Treat symptomatically.
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Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable extinguishing equipment	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
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Specific hazards arising from the chemical

Specific hazards arising from the chemical	No information available.
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Special protective actions for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions 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.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

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 should 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.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls No information available.

Thermal hazards No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid
Appearance granules
Colour white
Odour faint halogen.
Odour threshold No information available

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

Other information

Softening point Not available

Molecular weight	No data available
VOC content	No information available
Density	0.90 - 0.93 g/cm ³
Bulk density	No data available
Particle characteristics	No information available

Section 10: Stability and reactivity

Reactivity

Reactivity	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

Stability	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.
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Conditions to avoid

Conditions to avoid	Excessive heat.
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Incompatible materials

Incompatible materials	None known based on information supplied.
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Hazardous decomposition products

Hazardous Decomposition Products	Halogen containing gases. Carbon oxides. Chlorine gas. Bromine gas.
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Section 11: Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation	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.
Eye contact	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.
Skin contact	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.
Ingestion	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).

Symptoms 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

ATEmix (oral) 500.00 mg/kg
 ATEmix (dermal) 4,081.60 mg/kg
 ATEmix (inhalation-dust/mist) 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	= 735 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 50 mg/L (Rat) 1 h

See section 16 for terms and abbreviations

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

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure May cause respiratory irritation.

STOT - repeated exposure No information available.

Aspiration hazard 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 mg/L (96h, Salmo gairdneri)	-	EC50: 0.28 mg/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 in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

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-triazinetrione)
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-triazinetrione)
Transport hazard class(es) 8
Packing group III
Description UN1759, Corrosive solids, n.o.s. (Sodium dichloro-s-triazinetrione), 8, III

IMDG

UN number or ID number UN1759

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

AICS Complies.
NZIoC Complies.
TSCA Contact supplier for inventory compliance status.
DSL/NDL Contact supplier for inventory compliance status.
EINECS/ELINCS Contact supplier for inventory compliance status.
ENCS Contact supplier for inventory compliance status.
IECSC Contact supplier for inventory compliance status.
KECL Contact supplier for inventory compliance status.
PICCS 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/NDSL - 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 29-Aug-2023

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)
 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)
 U.S. 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

Australia

Australia SDS version information - UGHS

UL release:
GHS Revision 7
2022 Q1

Australia

Partial process, including GHS Wizard, NO TW

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

Document Review

ATTENTION!

Specific target organ toxicity (single exposure)	Category 3
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Category 3 Target organ effects: Respiratory irritation.

Full text of H-Statements referred to under section 3 EUH031 - Contact with acids liberates toxic gas H272 - May intensify fire; oxidiser H302 - Harmful if swallowed H319 - Causes serious eye irritation H335 - May cause respiratory irritation H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects

Composition

85