

SAFETY DATA SHEET



BIOSAN II

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP439

Version No: 4.1

Issue date: 01/04/2024

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	BIOSAN II
Product code	AP439
Pack size	2.5L; 5L & 20L

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Decontaminant biocide, hospital grade disinfectant and cleaner
--------------------------	--

Details of the manufacturer/importer

Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD	The Restoration Group Ltd
Address	11 Gamma Close, Beresfield 2322 NSW Australia	53 Wakefield Street, Onekawa, Napier 4010,
Telephone	(02) 4966 5516	(06) 835-0065
Website	www.actichem.com.au	www.restorationgroup.co.nz
Email	info@actichem.com.au	info@restorationgroup.co.nz

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	0800 - 764 - 766
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. Name of assigned group standard and HSNO approval number:

Cleaning Products Subsidiary Hazard Group Standard 2020 HSR002530

Poisons Schedule Not Applicable

GHS Classification Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1

Label elements drawn from HCIS and from ECHA C&L Inventory

Hazard pictograms	
-------------------	--

SIGNAL WORD **DANGER**

Hazard statement(s)

H315	Causes skin irritation
H318	Causes serious eye damage

Precautionary statement(s) Prevention

P280	Wear gloves and eye protection
P260	Do not breathe mists
P264	Wash contaminated skin thoroughly after handling

Precautionary statement(s) Response

P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P362+P352+P332+P313	IF ON SKIN: Take off contaminated clothing. Wash with plenty of water and soap. If skin irritation
P363	occurs, get medical advice / attention.

Precautionary statement(s) Storage

P405	Store locked up
------	-----------------

This SDS and the hazard classifications contained herein only apply to the product in its concentrated form as supplied. When diluted to 1:15 or more, they no longer apply. However, good hygiene and housekeeping practices should be adhered to

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No %[weight] Name	
Trade secret <10 Quaternary Ammonium Compound blend – Twin Chain	_____
64-02-8 <10 EDTA tetrasodium salt	_____
67-63-0 <10 isopropanol	_____

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: Seek medical advice / attention. Wash out immediately with water. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. If irritation continues, seek medical attention.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary. If swallowed do NOT induce vomiting.
Ingestion	If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area
---------------------	---

Special hazards arising from the substrate or mixture

Fire incompatibility	None known
----------------------	------------

Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. . Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	Non-combustible. Not considered a significant fire risk, however containers may burn. Heat may cause expansion or decomposition with violent rupture of containers. Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2), carbon monoxide (CO), other pyrolysis products typical of burning organic material.
HAZCHEM	Not applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Rinse away with copious amounts of water.
Major Spills	Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.
PPE	Personal protective equipment advice is contained in Section 8 of this SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	<p>DO NOT allow clothing wet with material to stay in contact with skin</p> <p>Avoid all personal contact. Wear protective clothing when risk of exposure occurs. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.</p>
Other information	

Conditions for safe storage, including any incompatibilities.

Suitable container	Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA


Source Ingredient		Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	isopropanol	Isopropyl alcohol	983 mg/m3 / 400 ppm	1,230 mg/m3 / 500 ppm	Not available	Not available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
Benzalkonium chloride	Benzalkonium chloride	Not Available	Not Available	Not Available
EDTA tetrasodium salt	Ethylenediaminetetraacetic acid, tetrasodium salt, dihydrate	30 mg/m3	330 mg/m3	2,000 mg/m3
isopropanol	Isopropyl alcohol	400 ppm	400 ppm	12,000 pm

Ingredient	Original IDLH	Revised IDLH
Benzalkonium chloride	Not Available	Not Available
EDTA tetrasodium salt	Not Available	Not Available
isopropanol	12,000 ppm	2,000 [LEL] ppm

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Safety glasses with side shields OR chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. Lens should be removed in a clean environment only after workers have washed hands thoroughly
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves, e.g. Neoprene.
Body protection	See Other protection below
Other protection	Barrier cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear light tan liquid		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Lemon	Molecular weight (g/mol)	Not Available
Odour threshold	Not Available	Auto-ignition temperature(°C)	Not Applicable
Melting point / freezing point (°C)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
pH (as supplied)	10.5	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Partition coefficient n-octanol / water	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Decomposition temperature	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC directives using animal models.) Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual.
Skin Contact	Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition.
Eye	If applied to the eyes, this material causes severe eye damage. Isopropanol vapour may cause mild eye irritation at 400 ppm. Splashes may cause severe eye irritation, possible corneal burns and eye damage. Eye contact may cause tearing or blurring of vision.
Chronic	There is no relevant data listed.

Toxicological effects of ingredients

Quaternary Ammonium Compound blend	Acute toxicity	Oral (estimate) 300 – 2000 mg/kg Dermal (estimate) 200 – 1000 mg/kg
	Skin corrosion/irritation	Corrosive to skin - may cause skin burns
	Eye damage/irritation	Corrosive to eyes: contact can cause corneal burns
	Respiratory/skin sensitization	Classified as not a respiratory sensitizer nor a skin sensitizer
	Germ cell mutagenicity	classified as non-hazardous
	Carcinogenicity	classified as non-hazardous
	Reproductive toxicity	classified as non-hazardous
	STOT (single exposure)	classified as non-hazardous
	STOT (repeated exposure)	classified as non-hazardous
	Aspiration toxicity	classified as non-hazardous
isopropanol	Acute toxicity	Oral LD50 (rat) 5045 – 5840 mg/kg Dermal LD 50 (rabbit) 12800 mg/kg Inhalation LC50 (rat) 16000 ppm/8h
	Skin corrosion/irritation	May be irritating
	Eye damage/irritation	Causes serious eye irritation
	Respiratory/skin sensitization	Not expected to be a sensitizer
	Germ cell mutagenicity	Not considered to be a mutagenic hazard
	Carcinogenicity	Not considered to be a carcinogenic hazard
	Reproductive toxicity	Not considered to be toxic to reproduction
	STOT (single exposure)	May cause drowsiness or dizziness
	STOT (repeated exposure)	Not expected to cause toxicity to a specific organ
	Aspiration toxicity	Not expected to be

EDTA tetrasodium salt	Acute toxicity	Oral LD50 (rat): 1000-2000 mg/kg
	Skin corrosion/irritation	Contact with skin may result in irritation
	Eye damage/irritation	Irritant (rabbit).
	Respiratory/skin sensitization	No Data Available
	Germ cell mutagenicity	No Data Available
	Carcinogenicity	Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC).
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
Quaternary Ammonium Compound blend	No data available			
isopropanol	LC50 96 Fish			9-640mg/L
	EC50 48 Crustacea			12500mg/L
			EC50 72 Algae or other aquatic plants	>1000mg/L
	EC0 24 Crustacea			5-102mg/L
EDTA tetrasodium salt	NOEC 504 Crustacea			=30mg/L
	LC50 96 Fish			1-592mg/L
	EC50 48 Crustacea			140mg/L
			EC50 72 Algae or other aquatic plants	=1.01mg/L
			EC10 72 Algae or other aquatic plants	=0.48mg/L
		NOEC 72 Algae or other aquatic plants	=0.39mg/L	

Extracted from Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)

Bio accumulative potential

Ingredient	Bioaccumulation
isopropanol	LOW (LogKOW = 0.05)

Mobility in soil

Ingredient	Mobility
isopropanol	HIGH (KOC =1.06)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations.
------------------------------	---

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (Not Applicable): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

QUATERNARY AMMONIUM COMPOUND IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australian Inventory of Industrial Chemicals (AIIC)
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

EDTA TETRASODIUM SALT IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4
 Australian Inventory of Industrial Chemicals (AIIC)

ISOPROPANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
 Australian Inventory of Industrial Chemicals (AIIC)
 International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	12/11/2020
Initial Date	0
	30/04/2020

SDS Version Summary

Version	Issue Date	Sections Updated
4.1	12/11/2020	Sections 2,11,12,15,16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of APPLIED PRODUCTS AUSTRALIA PTY LTD and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes

Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL;	Permissible Concentration-Short Term Exposure Limit
IARC;	International Agency for Research on Cancer
ACGIH;	American Conference of Government Industrial Hygienists
STEL;	Short Term Exposure Limit
TEEL;	Temporary Emergency Exposure Limit
IDLH;	Immediate Danger to Life or Health Concentrations
OSF;	Odour Safety Factor
NOAEL;	No Observed Effects Level
TLV;	Threshold Limit Value
LOD;	Limit Of Detection
OTV;	Odour Threshold Value
BCF;	Bio Concentration Factors
BEI;	Biological Exposure Index

This document is copyright.

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from Applied Products Australia Pty Ltd.

End of SDS