SAFETY DATA SHEET



BIOSAN II

APPLIED PRODUCTS AUSTRALIA PTYLTD

Catalogue number: AP439 Version No: 4.1 Issue date: 12/11/2020 Safety Data Sheet according to WHS and ADG requirements

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 manufacture	er/importer
Registered company name	APPLIED PRODUCTS AUSTRALIA PTY LTD
Address	11 Gamma Close, Beresfield 2322 NSW Australia
Telephone	(02) 4966 5516
Website	www.actichem.com.au
Email	info@actichem.com.au
Emergency telephone num	iber
Association / Organisation	Poisons Information Centre

AS	ssociation / Organisation	Poisons information Centre
	Emergency telephone numbers	13 11 26
Oth	her emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
GHS Classification	Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1
	Classification drawn from HCIS and from ECHA C&L Inventory

Label elements

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 occurs, get medical advice / attention.
P363	Wash contaminated clothing before reuse.
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

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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.
Ingestion	If swallowed do NOT induce vomiting. 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
ecial hazards arising from the substrate or mixture	
Fire incompatibility	None known
dvice 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

Safe handling	DO NOT allow clothing wet with material to stay in contact with skin 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.
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
EDTA tetrasodium salt	Ethylenediaminetetraacetic acid, tetrasodium salt, dihydrate			330 mg/m3	2,000 mg/m3
isopropanol	Isopropyl alcohol 400 ppm			400 ppm	12,000 pm
Ingredient	Original IDLH		Revised IDL	Н	
Benzalkonium chloride	Not Available		Not Available		
EDTA tetrasodium salt	Not Available	Not Available			
isopropanol	12,000 ppm	2,000 [LEL] p	pm		

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

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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	Acute toxicity	Oral (estimate) 300 - 2000 mg/kg Dermal (estimate) 200 - 1000 mg/kg	
Compound blend	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

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	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
	NOEC	504	Crustacea	=30mg/L
EDTA tetrasodium salt	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	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

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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

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End of SDS