

SAFETY DATA SHEET



CHLOROSAN

APPLIED PRODUCTS AUSTRALIA PTY LTD

Catalogue number: AP720.05

Version No: 4.1

Issue date: 23/11/2020

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	CHLOROSAN
Product code	AP720.05
Pack size	5L

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

Relevant identified uses	Chlorine based detergent, mould remover, stain remover and sanitiser
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Details of the manufacturer/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 number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

Poisons Schedule	6
GHS Classification	Serious Eye Damage Category 1, Skin Corrosion/Irritation Category 1B <i>Classification drawn from HCIS and ECHA C&L Inventory</i>

Label elements

Label elements	
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SIGNAL WORD	DANGER
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Hazard statement(s)

H314	Causes severe skin burns and eye damage.
H290	May be corrosive to metals
AUH031	Contact with acid liberates toxic gas

Precautionary statement(s) Prevention

P260	Do not breathe mist / vapours / spray.
P264	Wash contaminated skin thoroughly after handling
P280	Wear protective gloves / protective clothing / eye protection / face. protection

Precautionary statement(s) Response

P301+P310+P330+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting
P303+P310+P361+P353	IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P304+P340	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.

Precautionary statement(s) Storage

P405	Store locked up
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Precautionary statement(s) Disposal

P501	Dispose of contents / container in accordance with local regulations
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**Substances**

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1310-73-2	<10	<u>sodium hydroxide</u>
7782-50-5	<10	<u>chlorine (active)</u>
1643-20-5	<10	<u>lauryl dimethylamine oxide</u>

SECTION 4 FIRST AID MEASURES**Description of first aid measures**

Eye Contact	<p>If this product comes in contact with the eyes: Obtain medical advice / attention without delay Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. If necessary, transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel..</p>
Skin Contact	<p>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.</p>
Inhalation	<p>If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary</p>
Ingestion	<p>Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor..</p>

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

EYE INJURY

▶ Injury should be irrigated for 20-30 minutes.

▶ Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

SECTION 5 FIREFIGHTING MEASURES**Extinguishing media**

Extinguishing media	<p>Water spray or fog. Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide</p>
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Special hazards arising from the substrate or mixture

Fire incompatibility	None known
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Advice for firefighters

Fire Fighting	<p>Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. 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. Equipment should be thoroughly decontaminated after use.</p>
Fire/Explosion Hazard	<p>Non-combustible. Not considered a significant fire risk, however containers may burn. May emit corrosive fumes.</p>
HAZCHEM	2X

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Flush away with copious amounts of water.
Major Spills	<p>Wear full body protective clothing with breathing apparatus. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labeled 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.</p>
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>Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. 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. Always wash hands with soap and water after handling.</p>
Other information	<p>Store in original containers. Keep containers securely sealed. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. DO NOT store near acids, or oxidising agents No smoking, naked lights, heat or ignition sources Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.</p>

Conditions for safe storage, including any incompatibilities

Suitable container	<p>Plastic pail. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.</p>
Storage incompatibility	Avoid contact with acids

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

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	sodium hydroxide	sodium hydroxide	Not Available	Not Available	2 mg/m3	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
sodium hydroxide	sodium hydroxide	Not Available	Not Available	Not Available
sodium hypochlorite	sodium hypochlorite	2 mg/m3	20 mg/m3	630 mg/m3

Ingredient	Original IDLH	Revised IDLH
sodium hydroxide	Not Available	Not Available
sodium hypochlorite	250 mg/m3	10 mg/m3
lauryl dimethylamine oxide	Not Available	Not Available

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 unperforated side shields may be used where continuous eye protection is desirable. Chemical goggles whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted. Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afforded face protection. 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	Elbow length PVC gloves When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
Body protection	See Other protection below
Other protection	Overalls. PVC Apron. PVC protective suit may be required if exposure severe. Eyewash unit. Ensure there is ready access to a safety shower.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Slightly viscous yellow liquid		
Physical state	Liquid	Relative density (Water = 1)	1.02
Odour	Chlorine	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	12.5 – 13.5	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Applicable	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Explosive
Flammability	Not flammable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	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	Inhaling the fumes may cause slight respiratory irritation
Ingestion	Ingestion of the product may produce burns around the mouth, ulcerations and swellings of the mucous membranes, abdominal cramps, profuse saliva production, with an inability to speak or swallow. Both the oesophagus and stomach may experience burning pain; vomiting and diarrhea may follow. There is a danger of a fall in blood pressure, shock, confusion and delirium.
Skin Contact	The material can produce severe chemical burns following direct contact with the skin. Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. . Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. Contact may cause severe itchiness, skin lesions and mild eczema.
Eye	If applied to the eyes, this material causes severe eye damage. Direct eye contact with corrosive bases can cause pain and burns. There may be swelling, epithelium destruction, clouding of the cornea and inflammation of the iris. Mild cases often resolve; severe cases can be prolonged with complications such as persistent swelling, scarring, permanent cloudiness, bulging of the eye, cataracts, eyelids glued to the eyeball and blindness. Vapours or mists may be extremely irritating.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue.

Toxicological effects of ingredients

sodium hypochlorite	Acute toxicity	Oral – estimate >2000 mg/kg Dermal – estimate > 2000 mg/kg Inhalation – estimate >20mg/L
	Skin corrosion/irritation	Corrosive to skin - may cause skin burns
	Eye damage/irritation	Corrosive to eyes: contact can cause corneal burns.
	Respiratory/skin sensitization	Not a respiratory or 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
lauryl dimethylamine oxide	Acute toxicity	Oral LD50 >1065 mg/kg Dermal LD50 >2000 mg/kg
	Skin corrosion/irritation	Causes skin irritation.
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	not expected to cause skin sensitization
	Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic
	Carcinogenicity	not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA
	Reproductive toxicity	not expected to cause reproductive or developmental effects
	STOT (single exposure)	Not applicable
	STOT (repeated exposure)	Not applicable
	Aspiration toxicity	Not applicable
sodium hydroxide	Acute toxicity	Data not available
	Skin corrosion/irritation	Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.
	Eye damage/irritation	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns.
	Respiratory/skin sensitization	Not expected to be a sensitizer
	Germ cell mutagenicity	No expected to be mutagenic
	Carcinogenicity	Not expected to be carcinogenic
	Reproductive toxicity	Data not available
	STOT (single exposure)	May cause irritation to respiratory system
	STOT (repeated exposure)	Data not available
	Aspiration toxicity	Not considered an aspiration hazard

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
sodium hydroxide	LC50	96	Fish	<180mg/L
	EC50	48	Crustacea	40.4mg/L
lauryl dimethylamine oxide	LC50	96	Fish	2.4mg/L
	EC50	48	Crustacea	2.9mg/L
	EC50	72	Algae or other aquatic plants	0.015mg/L
	EC10	72	Algae or other aquatic plants	0.002mg/L
	NOEC	72	Algae or other aquatic plants	0.003mg/L
sodium hypochlorite	LC50	96	Fish	0.037mg/L
	EC50	48	Crustacea	0.026mg/L
	EC50	72	Algae or other aquatic plants	0.018mg/L
	NOEC	72	Algae or other aquatic plants	0.005mg/L

Harmful to aquatic organisms. Prevent, by any means available, spillage from entering drains or water courses.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
sodium hydroxide	LOW	LOW
lauryl dimethylamine oxide	LOW	LOW

Bio accumulative potential

Ingredient	Bioaccumulation
sodium hydroxide	LOW (LogKOW = -3.8796)
lauryl dimethylamine oxide	HIGH (LogKOW = 4.673)

Mobility in soil

Ingredient	Mobility
sodium hydroxide	LOW (KOC = 14.3)
lauryl dimethylamine oxide	LOW (KOC = 18660)

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

Product / packaging disposal	
	Recycle container whenever possible. Dispose of product and containers in accordance with local government regulations

SECTION 14 TRANSPORT INFORMATION**Labels Required**

Marine Pollutant	NO
HAZCHEM	2X

Land transport (ADG): 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****SODIUM HYDROXIDE 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 5
Australian Inventory of Industrial Chemicals (AIIC)

LAURYL DIMETHYLAMINE OXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australian Inventory of Industrial Chemicals (AIIC)

SODIUM HYPOCHLORITE 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 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
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	23/11/2020
Initial Date	18/11/2016

SDS Version Summary

Version	Issue Date	Sections Updated
4.1	23/11/2020	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
BEL:	Biological Exposure Index

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End of SDS