ITW Polymers & Fluids

Chemwatch: 5684-68

Version No: 2.1 Safety Data Sheet according to Work Health and Safety Regulations (Hazardous Chemicals) 2023 and ADG requirements

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name	Rain-X Pro High Foaming Cerami-X Wash & Wax	
Chemical Name	Not Applicable	
Synonyms	Part Number: 620199	
Chemical formula	Not Applicable	
Other means of identification	Not Available	

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

Relevant identified uses	High Foaming Cerami-X Car Wash.
	Use according to manufacturer's directions.

Details of the manufacturer or supplier of the safety data sheet

Registered company name	ITW Polymers & Fluids	ITW Polymers & Fluids NZ
Address	100 Hassall New South Wales 2164 Australia	Unit 2/38 Trugood Drive 2013 New Zealand
Telephone	+61 2 9757 8800	+64 9272 1940
Fax	Not Available	Not Available
Website	Not Available	Not Available
Email	orders@itwpf.com.au	info@aamtech.co.nz

Emergency telephone number

Association / Organisation	Chemwatch	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone numbers	1800 951 288	+61 1800 951 288
Other emergency telephone numbers	+61 2 9186 1132	+61 3 9573 3188

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 Hazards identification

Classification of the substance or mixture

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

Poisons Schedule	Not Applicable	
Classification ^[1]	Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 1	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI	

Label elements

Hazard pictogram(s)

Signal word Danger

Issue Date: **11/06/2024** Print Date: **01/08/2024** S.GHS.AUS.EN

Hazard statement(s)

H315	Causes skin irritation.
H318	Causes serious eye damage.

Precautionary statement(s) General

P101	If medical advice is needed, have product container or label at hand.	
P102	Keep out of reach of children.	
P103	Read carefully and follow all instructions.	

Precautionary statement(s) Prevention

P280	Wear protective gloves, protective clothing, eye protection and face protection.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

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

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
56-81-5	7-13	glycerol
7722-84-1	1-5	hydrogen peroxide
112-34-5	1-5	diethylene glycol monobutyl ether
Legend:	Legend: 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available	

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: 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. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. 	
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 or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay. 	
Ingestion	If swallowed do NOT induce vomiting.	

Issue Date: 11/06/2024 Print Date: 01/08/2024

Rain-X Pro High Foaming Cerami-X Wash & Wax

- 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

Hydrogen peroxide at moderate concentrations (5% or more) is a strong oxidant.

- Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered.
- · Because of the likelihood of systemic effects attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided.
- There is remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation" Fisher Scientific SDS

SECTION 5 Firefighting measures

Extinguishing media

For hydrogen peroxide

NOTE: Chemical extinguishing agents may accelerate decomposition. [CCINFO]

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility	 Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
----------------------	--

Advice for firefighters

Fire Fighting	 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 water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon dioxide (CO2) acrolein other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes.
HAZCHEM	Not Applicable

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	 Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. For hydrogen peroxide: Dilute with large quantities of water (at least ten (10) times the volume of hydrogen peroxide). Sodium bicarbonate may be used to accelerate breakdown.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling Safe handling • DO NOT allow clothing wet with material to stay in contact with skin • Avoid all personal contact, including inhalation. • Wear protective clothing when risk of exposure occurs. • Use in a well-ventilated area. • Prevent concentration in hollows and sumps. Other information • Keep containers securely sealed. • No smoking, naked lights or ignition sources. • Store in a cool, dry, well-ventilated area.

Conditions for safe storage, including any incompatibilities

Suitable container	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. Hydrogen peroxide containing/ generating materials requiring rigid packaging. Store in: containers with vented lids. properly passivated aluminium containers. properly passivated stainless steel.
Storage incompatibility	Avoid reaction with oxidising agents

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	glycerol	Glycerin mist	10 mg/m3	Not Available	Not Available	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Australia Exposure Standards	hydrogen peroxide	Hydrogen peroxide	1 ppm / 1.4 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
glycerol	45 mg/m3	180 mg/m3		1,100 mg/m3
hydrogen peroxide	Not Available	Not Available		Not Available
diethylene glycol monobutyl ether	30 ppm	33 ppm		200 ppm
Ingredient	Original IDLH		Revised IDLH	
glycerol	Not Available		Not Available	
hydrogen peroxide	75 ppm		Not Available	
diethylene glycol monobutyl ether	Not Available		Not Available	

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit	
diethylene glycol monobutyl ether	E	≤ 0.1 ppm	
Notes:	Occupational exposure banding is a process of assigning chemica potency and the adverse health outcomes associated with exposu band (OEB), which corresponds to a range of exposure concentra	ational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's y and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.	

Exposure controls

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to

	provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
Individual protection measures, such as personal protective equipment	
Eye and face protection	 Safety glasses with side shields. Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Where hydrogen peroxide exposure may occur do NOT wear PVA gloves. DO NOT use leather or cotton gloves, leather shoes as spill may cause fire. Care: Effects may be delayed. Hand cream offers no protection for hydrogen peroxide and should not be used.
Body protection	See Other protection below
Other protection	 Overalls. P.V.C apron. Barrier cream. Skin cleansing cream.

Respiratory protection

Type AB-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Opaque/White or slightly tan-white liquid with mild odour.		
Physical state	Liquid	Relative density (Water = 1)	1.01
Odour	Slight	Partition coefficient n- octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	7.28	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available

Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Not Available	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	<0.2

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. Solutions of hydrogen peroxide slowly decompose, releasing oxygen, and so are often stabilised by the addition of acetanilide, etc.
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	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects. The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Inhaling excessive levels of mist may result in headache, dizziness, vomiting, diarrhoea, irritability, sleeplessness and fluid in the lungs, and cause extreme irritation of the nose and chest, cough, discomfort, shortness of breath and inflammation of the nose and throat. Whole-body effects of hydrogen peroxide poisoning include tremor, numbness of the limbs, convulsions, coma and shock. Hydrogen peroxide has poor warning properties.			
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. Hydrogen peroxide may cause blistering and bleeding from the throat and stomach. When swallowed, it may release large quantities of oxygen which could hyper-distend the stomach and gut and may cause internal bleeding, mouth and throat burns and rupture of the gut. There may also be fever, nausea, foaming at the mouth, vomiting, chest and stomach pain, loss of consciousness, and movement disorders and death. Large amounts can also cause cessation of breath, dizziness, headache, tremors weakness or numbness in the extremities and convulsions.			
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material 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. Hydrogen peroxide is used topically as dental gel and to clean minor wounds. It may cause dose dependent effect on the skin including bleaching, blistering, reddening and corrosion (at >50% concentration).			
Eye	If applied to the eyes, this material causes severe eye damage. Hydrogen peroxide concentrations above 10% are corrosive to the eye and may cause corneal ulceration even days after exposure.			
Chronic	 There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Hydrogen peroxide as a human food additive is generally regarded as safe, when used with certain limitations. In experimental animals hydrogen peroxide given by mouth causes damage to the teeth, liver, kidney, stomach and bowel. Inhalation exposure to hydrogen peroxide caused skin irritation, sneezing and death in animals. Skin irritation, sneezing, excessive secretion of tears, and whitening of the hair was also seen in animals chronically exposed to hydrogen peroxide. 			
Rain-X Pro High Foaming	ΤΟΧΙΟΙΤΥ	IRRITATION		
Cerami-X Wash & Wax	Not Available	Not Available		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
glycerol	Dermal (Guinea Pig) LD50: 58500 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]		
	Inhalation (Rat) LC50: >5.85 mg/L4h ^[1]	Skin: no adverse effect observed (not irritating) ^[1]		
	Oral (Mouse) LD50; 4090 mg/kg ^[2]			

hydrogen peroxide hydrogen peroxide Inhalatio Oral (Ra diethylene glycol monobutyl ether	rabbit) LD50: >2000 mg/kg ^[1] n (Mouse) LC50: 2800 mg/L4h ^[2] t) LD50: >225 mg/kg ^[2] Y rabbit) LD50: 4120 mg/kg ^[2] t) LD50: 5660 mg/kg ^[2]	IRRITATION Not Available IRRITATION Eye (rabbit): 20 Eve (rabbit): 5 m	mg/24b moderate
hydrogen peroxide Inhalatic Oral (Ra diethylene glycol monobutyl ether	rabbit) LD50: >2000 mg/kg ⁽²⁾ n (Mouse) LC50: 2800 mg/L4h ^[2] t) LD50: >225 mg/kg ^[2] Y rabbit) LD50: 4120 mg/kg ^[2] t) LD50: 5660 mg/kg ^[2]	IRRITATION Eye (rabbit): 20	mg/24b moderate
diethylene glycol monobutyl ether	n (Mouse) LC50: 2800 mg/L4h ^[2] t) LD50: >225 mg/kg ^[2] Y rabbit) LD50: 4120 mg/kg ^[2] t) LD50: 5660 mg/kg ^[2]	IRRITATION Eye (rabbit): 20	mg/24h moderate
diethylene glycol monobutyl ether	t) LD50: >225 mg/kg ^[2] 'Y irabbit) LD50: 4120 mg/kg ^[2] t) LD50: 5660 mg/kg ^[2]	IRRITATION Eye (rabbit): 20	ma/24h moderate
diethylene glycol monobutyl ether	rabbit) LD50: 4120 mg/kg ^[2] t) LD50: 5660 mg/kg ^[2]	IRRITATION Eye (rabbit): 20 Eve (rabbit): 5 m	ma/24h moderate
diethylene glycol monobutyl ether	rabbit) LD50: 4120 mg/kg ^[2] t) LD50: 5660 mg/kg ^[2]	Eye (rabbit): 20	mg/24h moderate
diethylene glycol monobutyl ether	t) LD50: 5660 mg/kg ^[2]	Eve (rabbit): 5 m	
		ng/kg ^[2] Eye (rabbit): 5 mg - SEVERE	
		Eye: adverse eff	ect observed (irritating) ^[1]
		Skin: no adverse	e effect observed (not irritating) ^[1]
Legend: 1. Value o Unless ot	btained from Europe ECHA Registered herwise specified data extracted from F	l Substances - Acute toxicity 2. Va RTECS - Register of Toxic Effect c	lue obtained from manufacturer's SDS. f chemical Substances
GLYCEROL At very hig airway. Ot developme	At very high concentrations, evidence predicts that glycerol may cause tremor, irritation of the skin, eyes, digestive tract and airway. Otherwise it is of low toxicity. There is no significant evidence to suggest that it causes cancer, genetic, reproductive or developmental toxicity.		
HYDROGEN PEROXIDE Exposure damage to observed	Exposure to hydrogen peroxide via the skin or oral route can produce toxic effects. Animal studies have shown evidence of damage to the kidney, gut, thymus and liver. Stomach and intestinal lesions including benign and malignant cancers have been observed in mice. It may produce genetic and developmental defects but no reproductive toxicity was reported in mice.		
DIETHYLENE GLYCOL MONOBUTYL ETHER damage, s developme	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. This category includes diethylene glycol ethyl ether (DGEE), diethylene glycol propyl ether (DGPE) diethylene glycol butyl ether (DGBE) and diethylene glycol hexyl ether (DGHE) and their acetates. Studies show that they can cause kidney and liver damage, skin and eye irritation as well as blood changes but do not cause damage to the reproductive, genetic and developmental abnormalities, sensitisation or respiratory systems. However, DGEE is reported to cause sperm insufficiency.		
Rain-X Pro High Foaming Cerami-X Wash & Wax & HYDROGEN PEROXIDENo signific The substr NOT class Evidence	No significant acute toxicological data identified in literature search. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.		
GLYCEROL & HYDROGEN Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.			
Acute Toxicity		Carcinogenicity	X
Skin Irritation/Corrosion		Reproductivity	×
Serious Eye Damage/Irritation		STOT - Single Exposure	×
Respiratory or Skin ×		STOT - Repeated Exposure	×
Mutagenicity X		Aspiration Hazard	×

Legend:

Data either not available or does not fill the criteria for classification
 Data available to make classification

SECTION 12 Ecological information

oxicity					
Rain-X Pro High Foaming Cerami-X Wash & Wax	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
glycerol	LC50	96h	Fish	>11mg/L	2
	EC0(ECx)	24h	Crustacea	>500mg/l	1
hydrogen peroxide	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	0.69mg/l	4

	EC50	48h	Crustacea	2mg/l	2
	LC50	96h	Fish	16.4mg/l	2
	EC50	96h	Algae or other aquatic plants	2.27mg/l	4
	NOEC(ECx)	72h	Algae or other aquatic plants	0.1mg/l	1
	Endpoint	Test Duration (hr)	Species	Value	Source
diethylene glycol monobutyl ether	EC50	72h	Algae or other aquatic plants	1101mg/l	2
	EC50	48h	Crustacea	>100mg/l	1
	LC50	96h	Fish	1300mg/l	2
	NOEC(ECx)	96h	Algae or other aquatic plants	>=100mg/l	1
	EC50	96h	Algae or other aquatic plants	>100mg/l	1
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA. Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) -				

Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Toxic to aquatic organisms.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

For Glycerol: Log Kow: -2.66 to -2.47, Atmospheric Fate: Glycerol is broken down in the air by hydroxyl radicals the half-life for this process is 6.8 hours. However, only a negligible amount of the substance will move to the atmospheric compartment. Terrestrial Fate: Only a negligible amount of glycerol will move into the soil compartment, if released into the environment. Aquatic Fate: Glycerol is considered to be readily biodegradable in the aquatic environment. For hydrogen peroxide:log Kow: -1.36:

Environmental Fate: Hydrogen peroxide is a naturally occurring substance (typical background concentrations < 1 - 30 g/l), which is produced by almost all cells in their metabolism, with the exception of anaerobic bacteria. Hydrogen peroxide is a reactive substance in the presence of other substances, elements, radiation, materials and can be degraded by micro-organisms or higher organisms. Air - Hydrogen peroxide is degraded by light and thus may be removed from the atmosphere by photolysis giving rise to hydroxyl radicals, by reaction with hydroxyl radicals, or by heterogenous loss processes such as rain-out. Significantly higher hydrogen peroxide concentrations are found in polluted atmospheres as compared with clean air, presumably due to oxidation of reactive hydrocarbons as a result of exposure to light.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
glycerol	LOW	LOW
hydrogen peroxide	LOW	LOW
diethylene glycol monobutyl ether	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
glycerol	LOW (LogKOW = -1.76)
hydrogen peroxide	LOW (LogKOW = -1.571)
diethylene glycol monobutyl ether	LOW (BCF = 0.46)

Mobility in soil

Ingredient	Mobility
glycerol	HIGH (Log KOC = 1)
hydrogen peroxide	LOW (Log KOC = 14.3)
diethylene glycol monobutyl ether	LOW (Log KOC = 10)

SECTION 13 Disposal considerations

Waste treatment methods Product / Packaging disposal Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.

• Where possible retain label warnings and SDS and observe all notices pertaining to the product.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws
operating in their area. In some areas, certain wastes must be tracked.
A Hierarchy of Controls seems to be common - the user should investigate:
▶ Reduction
▶ Reuse
▶ Recycling
▶ Disposal (if all else fails)
This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.
DO NOT allow wash water from cleaning or process equipment to enter drains.
It may be necessary to collect all wash water for treatment before disposal.
In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
Where in doubt contact the responsible authority.
Recycle wherever possible or consult manufacturer for recycling options.
 Consult State Land Waste Authority for disposal.
Bury or incinerate residue at an approved site.
 Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

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

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
glycerol	Not Available
hydrogen peroxide	Not Available
diethylene glycol monobutyl ether	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
glycerol	Not Available
hydrogen peroxide	Not Available
diethylene glycol monobutyl ether	Not Available

SECTION 15 Regulatory information

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

glycerol is found on the following regulatory lists

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

hydrogen peroxide 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

 $\label{eq:standard} \mbox{Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule \mbox{6}$

Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

diethylene glycol monobutyl ether is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Issue Date: 11/06/2024 Print Date: 01/08/2024

Rain-X Pro High Foaming Cerami-X Wash & Wax

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5 Australian Inventory of Industrial Chemicals (AIIC)

Additional Regulatory Information

Not Applicable

National Inventory Status

National Inventory	Status	
Australia - AIIC / Australia Non-Industrial Use	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (glycerol; hydrogen peroxide; diethylene glycol monobutyl ether)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	Yes	
Japan - ENCS	Yes	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	
USA - TSCA	Yes	
Taiwan - TCSI	Yes	
Mexico - INSQ	Yes	
Vietnam - NCI	Yes	
Russia - FBEPH	Yes	
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.	

SECTION 16 Other information

Revision Date	11/06/2024
Initial Date	11/06/2024

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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 CHEMWATCH.

TEL (+61 3) 9572 4700.