

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name BUFFERED SALICYLALDEHYDE REAGENT

Synonyms

1.2 Uses and uses advised against

Uses LABORATORY APPLICATIONS • LABORATORY REAGENT

1.3 Details of the supplier of the product

CB1299

Supplier name	ROWE SCIENTIFIC PTY LTD
Address	11 Challenge Blvd, Wangara, WA, 6065, AUSTRALIA
Telephone	(08) 9302 1911
Fax	(08) 9302 1905
Email	rowewa@rowe.com.au
Website	http://www.rowe.com.au

1.4 Emergency telephone numbers

Emergency (08) 9302 1911

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical Hazards

Not classified as a Physical Hazard

Health Hazards

Skin Corrosion/Irritation: Category 2 Serious Eye Damage / Eye Irritation: Category 2A

Environmental Hazards

Not classified as an Environmental Hazard

2.2 GHS Label elements

Signal word	WARNING
Pictograms	!

Hazard statements

H315 H319 Causes skin irritation. Causes serious eye irritation.

Prevention statements

P264 P280 Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.



Response statements

P302 + P352 P305 + P351 + P338

P321 P332 + P337 + P313 P362 + P364 IF ON SKIN: Wash with plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment is advised - see first aid instructions.

3 If skin or eye irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse.

Storage statements

None allocated.

Disposal statements

None allocated.

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
AMMONIUM ACETATE	631-61-8	211-162-9	15 to 20%
ETHANOL	64-17-5	200-578-6	10 to 15%
SULPHURIC ACID	7664-93-9	231-639-5	2 to 3%
CITRIC ACID	77-92-9	201-069-1	<1%
DISODIUM DIHYDROGEN ETHYLENEDIAMINETETRAACETATE	6381-92-6	613-386-6	<1%
PHOSPHORIC ACID	7664-38-2	231-633-2	<1%
SALICYLALDEHYDE	90-02-8	201-961-0	<1%
WATER	7732-18-5	231-791-2	Remainder

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

- Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
- Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.
- Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
- First aid facilities Eye wash facilities and safety shower are recommended.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases if strongly heated.

5.3 Advice for firefighters

Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.



5.4 Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from moisture, incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
ingreatent	Kelelelice		mg/m³	ppm	mg/m³
Ethanol	SWA [AUS]	1000	1880		
Ethanol (Ethyl alcohol)	SWA [Proposed]	200	380	800	1500
Phosphoric acid	SWA [AUS]		1		3
Sulphuric acid	SWA [AUS]		1		3
Sulphuric acid	SWA [Proposed]		0.1		

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.



PPE

Eye / FaceWear splash-proof goggles.HandsWear PVC or rubber gloves.BodyWhen using large quantities or where heavy contamination is likely, wear coveralls.RespiratoryWhere an inhalation risk exists, wear a Type B (acid gas and vapours) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	LIQUID
Odour	SLIGHT ODOUR
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
рН	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Relative density	NOT AVAILABLE
Solubility (water)	NOT AVAILABLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization will not occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites) and alkalis (e.g. sodium hydroxide).

10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute oral exposure may result in irritation of the mouth, throat, oesophagus and gastrointestinal tract.



Information available for the ingredients:

Ingredient		Oral LD50	Dermal LD50	Inhalation LC50
AMMONIUM ACETATE		> 2000 mg/kg (mice)		
ETHANOL		3450 mg/kg (mouse)		20000 ppm/10 hours (rat)
SULPHURIC ACID		2140 mg/kg (rat)		18 mg/m³ (guinea pig); 510 mg/m3/2hrs (rat)
CITRIC ACID		3000 mg/kg (rat)	> 2000 mg/kg (rat)	
DISODIUM DIHYDROGEN ETHYLENEDIAMINETETRAACETATE		2800 mg/kg (rat) (OECD Test Guideline 401)		
PHOSPHORIC ACID		1530 mg/kg (rat)	2740 mg/kg (rabbit)	3846 mg/m³ (rat)
SALICYLALDEHYDE		504 mg/kg (mouse)	20 mL/kg (guinea pig)	
WATER		> 90,000 mg/kg (rat)		
Skin	Contact may result in irritatio	n, redness, pain and rash.		
Eye	Contact may result in irritation, lacrimation, pain and redness.			
Sensitisation	Not classified as causing skin or respiratory sensitisation.			
Mutagenicity	Not classified as a mutagen.			
Carcinogenicity	Not classified as a carcinogen.			
Reproductive	Not classified as a reproductive toxin.			
STOT - single exposure	Over exposure may result in mucous membrane irritation of the respiratory tract, coughing, nausea, dizziness and headache.			
STOT - repeated exposure	Not classified as causing organ damage from repeated exposure. Adverse effects are generally associated with single exposure.			
Aspiration	Not classified as causing aspiration.			

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information provided.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information if disposing of large quantities (if required). Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None allocated.	None allocated.	None allocated.
14.2 Proper Shipping Name	None allocated.	None allocated.	None allocated.
14.3 Transport hazard class	None allocated.	None allocated.	None allocated.
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

Not a Marine Pollutant.

14.6 Special precautions for user

Hazchem code None allocated.

15. REGULATORY INFORMATION

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

Poison schedule Classified as a Schedule 6 (S6) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

Inventory listings AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) All components are listed on AIIC, or are exempt.

16. OTHER INFORMATION

Additional information RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.



Abbreviations	ACGIH CAS # CNS EC No. EMS	American Conference of Governmental Industrial Hygienists Chemical Abstract Service number - used to uniquely identify chemical compounds Central Nervous System EC No - European Community Number Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous		
	GHS GTEPG IARC LC50 LD50 mg/m ³ OEL pH STEL STOT-RE STOT-RE STOT-SE SUSMP SWA TLV TWA	Goods) Globally Harmonized System Group Text Emergency Procedure Guide International Agency for Research on Cancer Lethal Concentration, 50% / Median Lethal Concentration Lethal Dose, 50% / Median Lethal Dose Milligrams per Cubic Metre Occupational Exposure Limit relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). Parts Per Million Short-Term Exposure Limit Specific target organ toxicity (repeated exposure) Specific target organ toxicity (single exposure) Standard for the Uniform Scheduling of Medicines and Poisons Safe Work Australia Threshold Limit Value		
Report status	This documen	Time Weighted Average It has been compiled by RMT on behalf of the manufacturer, importer or supplier of the		
	It is based of manufacturer, the current sta at the time of	erves as their Safety Data Sheet ('SDS'). on information concerning the product which has been provided to RMT by the importer or supplier or obtained from third party sources and is believed to represent ate of knowledge as to the appropriate safety and handling precautions for the product f issue. Further clarification regarding any aspect of the product should be obtained he manufacturer, importer or supplier.		
	While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.			
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ChemAlert.