

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

## 1.1 Product identifier

### Product name GLYCEROL & HYDROCHLORIC ACID SOLUTION

Synonyms

CB3607

#### 1.2 Uses and uses advised against

Uses LABORATORY CHEMICAL(S) • SCIENTIFIC APPLICATIONS

#### 1.3 Details of the supplier of the product

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

(08) 9302 1911

#### 1.4 Emergency telephone numbers

Emergency

## 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 1C Serious Eye Damage / Eye Irritation: Category 1

#### **Environmental Hazards**

Not classified as an Environmental Hazard

#### 2.2 GHS Label elements

Signal word D	ANGER
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Pictograms

## $\mathbf{\wedge}$



#### Hazard statements

H314	Causes severe skin burns and eye
H318	Causes serious eye damage.

#### **Prevention statements**

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

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damage.

<b>Response statements</b> P301 + P330 + P331 P303 + P361 + P353	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 P305 + P351 + P338	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 P321 P363	Immediately call a POISON CENTER or doctor/physician. Specific treatment is advised - see first aid instructions. Wash contaminated clothing before reuse.
Storage statements P405	Store locked up.
<b>Disposal statements</b> P501	Dispose of contents/container in accordance with relevant regulations.
2.3 Other hazards No information provided	

3. COMPOSITION/ INFORMATION ON INGREDIENTS

#### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content (w/w)
GLYCEROL (GLYCERINE)	56-81-5	200-289-5	30 to 60%
HYDROCHLORIC ACID	7647-01-0	231-595-7	3.6 to <10%
WATER	7732-18-5	231-791-2	Remainder

## 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

EyeIf in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to<br/>stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.InhalationIf inhaled, remove from contaminated area. To protect rescuer, use an Air-line respirator where an inhalation<br/>risk exists. Apply artificial respiration if not breathing.SkinIf skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.IngestionFor advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If<br/>swallowed, do not induce vomiting.First aid facilitiesEye wash facilities and safety shower should be available.

#### 4.2 Most important symptoms and effects, both acute and delayed

Causes burns.

#### 4.3 Immediate medical attention and special treatment needed

CORROSIVE POISONING TREATMENT: Immediate treatment preferably in a hospital is mandatory. It is also important to attempt to discover the chemical substances ingested. In treating corrosive poisoning, DO NOT INDUCE VOMITING; DO NOT ATTEMPT GASTRIC LAVAGE; and DO NOT ATTEMPT TO NEUTRALISE THE CORROSIVE SUBSTANCE. Vomiting will increase the severity of damage to the oesophagus as the corrosive substance will again come in contact with it. Attempting gastric lavage may result in perforating either the oesophagus or stomach. Immediately dilute the corrosive substance by having the patient drink milk or water. If the trachea has been damaged tracheostamy may be required. For oesophageal burns begin broad-spectrum antibiotics and corticosteroid therapy. Intravenous fluids will be required if oesophageal or gastric damage prevents ingestion of liquids. Long-range therapy will be directed toward preventing or treating oesophageal scars and strictures.

## 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 (chlorides) when heated to decomposition. May evolve flammable hydrogen gas when in contact with some metals.

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#### 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

- 2X
- 2 Fine Water Spray.
- X Wear liquid-tight chemical protective clothing and breathing apparatus. Contain spill and run-off.

## 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. Contact emergency services where appropriate.

#### 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 secured, cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate ventilation and fire protection systems.

#### 7.3 Specific end uses

No information provided.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	TWA		STEL	
	Itererence	ppm	mg/m³	ppm	mg/m³
Glycerin mist (a)	SWA [AUS]		10		
Hydrogen chloride (Hydrochloric acid)	SWA [AUS]	5 (Peak)	7.5 (Peak)		

#### **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.



#### PPE

Eye / Face	Wear splash-proof goggles. When using large quantities or where heavy contamination is likely, wear a faceshield.
Hands	Wear PVC or rubber gloves.
Body	Wear coveralls. When using large quantities or where heavy contamination is likely, wear rubber or PVC boots and a PVC apron.
Respiratory	Where an inhalation risk exists, wear a Type B (Inorganic gases 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
Specific gravity	NOT AVAILABLE
Solubility (water)	SOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT RELEVANT
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

Hazardous polymerisation is not expected to 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), alkalis (e.g. sodium hydroxide) and metals.

#### 10.6 Hazardous decomposition products

May evolve toxic gases (chlorides) when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

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#### 11.1 Information on toxicological effects

Acute toxicity Ingestion may result in burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Information available for the ingredients:

Ingredient		Oral LD50	Dermal LD50	Inhalation LC50
GLYCEROL (GLYC	ERINE)	4090 mg/kg (mouse)		
HYDROCHLORIC ACID		2210 mg/kg (rat)		1108 ppm/1hr (human - respiratory irritation)
Skin	Causes burns. Contact may result in irritation, redness, pain, rash, dermatitis and possible burns.			
Eye	Causes burns. Contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage.			
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 irritation of the nose and throat, coughing, nausea and headache. High level exposure may result in nasal inflammation, delayed breathing difficulties and pulmonary oedema.			
STOT - repeated exposure	Not classified as causing organ damage from repeated 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

If hydrochloric acid is spilled on soil, it will infiltrate. During its transport through soil, the acid will dissolve some of the soil material, in particular carbonates, and will be neutralised to some degree. However, significant amounts of acid are expected to remain for transport down to groundwater. Toxic to aquatic invertebrates at low levels (LC50: 1.21 ppm/96 hours).

## 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

 
 Waste disposal
 Neutralise with lime, weak alkali or similar. For small amounts, absorb with sand or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).

 Legislation
 Dispose of in apportdance with relevant legal legislation

**Legislation** Dispose of in accordance with relevant local legislation.

## 14. TRANSPORT INFORMATION

## CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE





	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	1760	1760	1760
14.2 Proper Shipping Name	CORROSIVE LIQUID, N.O.S. (contains hydrochloric acid)	CORROSIVE LIQUID, N.O.S. (contains hydrochloric acid)	CORROSIVE LIQUID, N.O.S. (contains hydrochloric acid)
14.3 Transport hazard class	8	8	8
14.4 Packing Group			

#### 14.5 Environmental hazards

Not a Marine Pollutant

#### 14.6 Special precautions for user

Hazchem code	2X
GTEPG	8A1
EmS	F-A, S-B

## **15. REGULATORY INFORMATION**

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

Poison schedule Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

Inventory listings AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS, or are exempt.

## **16. OTHER INFORMATION**

Additional information

ACIDS: When mixing acids with water (diluting), caution must be taken as heat will be generated which causes violent spattering. Always add a small volume of acid to a large volume of water, NEVER the reverse.

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.

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGE (TWA) or WES (WORKPLACE EXPOSURE STANDARD) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

#### 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 <sup>3</sup> OEL pH	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).
	ppm STEL STOT-RE STOT-SE SUSMP SWA TLV TWA	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 Time Weighted Average
Report status	This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').	
	It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the 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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