

# **SAFETY DATA SHEET**

# 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name NEUTRABASE Synonym(s) NEUTRA BASE

1.2 Uses and uses advised against

**Use(s)** ANODISING OF METALS • PH CONTROL • WATER TREATMENT

1.3 Details of the supplier of the product

Supplier name LIBERATO BULK CHEMICAL & REPACK SPECIALISTS PTY. LTD.

Address 1 Kalinga Way, Landsdale, WA, 6065, AUSTRALIA

**Telephone** 1300 377 696

 Email
 sales@liberato.com.au

 Website
 http://www.liberato.com.au

1.4 Emergency telephone number(s)

**Emergency** 1300 377 696

# 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

GHS classification(s) Skin Corrosion/Irritation: Category 1A

2.2 Label elements

Signal word DANGER

Pictogram(s)



Hazard statement(s)

H314 Causes severe skin burns and eye damage.

Prevention statement(s)

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.

Response statement(s)

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

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do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician. P321 Specific treatment is advised - see first aid instructions.

P363 Wash contaminated clothing before reuse.

Storage statement(s)

P405 Store locked up.



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#### Disposal statement(s)

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
SULPHURIC ACID	7664-93-9	231-639-5	>60%
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. To protect rescuer, use a Full-face Type B (Inorganic and acid

gas) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.

Seek urgent medical attention

**Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If

swallowed, do not induce vomiting. Seek urgent medical assistance.

**First aid facilities** Eye wash facilities and safety shower should be available.

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

Over exposure may result in severe skin, eye and respiratory burns with permanent lung and tissue damage. Strong inorganic acid mists containing sulphuric acid is classified as carcinogenic to humans (IARC Group 1).

### 4.3 Immediate medical attention and special treatment needed

CORROSIVE POISONING TREATMENT: Immediate treatment preferably in a hospital is mandatory. 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 (sulphur oxides) when heated to decomposition. May evolve flammable hydrogen gas in contact with some metals.

## 5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. 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

2P

2 Fine Water Spray.

P Risk of violent reaction or explosion. Wear liquid-tight chemical protective clothing and breathing apparatus. Dilute spill and run-off.

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# 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. Clear area of all unprotected personnel. Ventilate area where possible. 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 sodium bicarbonate or 50-50 mixture of sodium carbonate and calcium hydroxide. Collect for complete neutralisation and appropriate 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 and protected from physical damage 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 use(s)

No information provided.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

# 8.1 Control parameters

# **Exposure standards**

Ingredient	Reference	TWA		STEL	
Ingredient		ppm	mg/m³	ppm	mg/m³
Sulphuric acid	SWA (AUS)		1		3

# **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.

PPF

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 boots and

a PVC apron. In a laboratory situation, wear a laboratory coat.

Respiratory Where an inhalation risk exists, wear a Type B (Inorganic gases and vapours) respirator. If spraying, with

prolonged use, or if in confined areas, wear an Air-line respirator.







# 9. PHYSICAL AND CHEMICAL PROPERTIES



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## 9.1 Information on basic physical and chemical properties

Appearance VISCOUS COLOURLESS LIQUID

Odour ODOURLESS
Flammability NON FLAMMABLE
Flash point NOT RELEVANT

**Boiling point** 140°C **Melting point** -8°C

Evaporation rate NOT AVAILABLE

**pH** < 1

Vapour density NOT AVAILABLE

Specific gravity 1.50
Solubility (water) SOLUBLE

Vapour pressure 2.87 mm Hg @ 20°C **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

Potential for exothermic hazard.

#### 10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

### 10.4 Conditions to avoid

Avoid contact with incompatible substances.

#### 10.5 Incompatible materials

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

#### 10.6 Hazardous decomposition products

May evolve toxic gases (sulphur oxides) when heated to decomposition.

# 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

Acute toxicity Information available for the product:

An acute oral toxicity study indicates an LD50 for sulphuric acid of 2140 mg/kg (rat). Toxic signs of oral

exposure in human are of irritation/corrosion of the gastrointestinal tract.

Information available for the ingredient(s):

Ingredient	Oral Toxicity	Dermal Toxicity	Inhalation Toxicity
	(LD50)	(LD50)	(LC50)
SULPHURIC ACID	2140 mg/kg (rat)		18 mg/m³ (guinea pig);

**Skin** Causes severe burns. Contact may result in irritation, redness, pain, rash, dermatitis and severe burns.

Eye Causes severe burns. Contact may result in irritation, lacrimation, pain, redness and corneal burns with

possible permanent eye damage.

Sensitisation Not classified as causing skin or respiratory sensitisation.

Mutagenicity Insufficient data available to classify as a mutagen.

**Carcinogenicity** Occupational exposure to strong inorganic acid mists containing sulphuric acid is classified as carcinogenic

to humans (IARC Group 1).



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**Reproductive** Insufficient data available to classify as a reproductive toxin.

STOT – single exposure

Over exposure may result in mucous membrane irritation of the respiratory tract, coughing, bronchitis,

ulceration, bloody nose, lung tissue damage and deterioration of pulmonary function.

STOT – repeated

Not classified as causing organ damage from repeated exposure. Adverse effects are generally associated with single exposure.

exposure Aspiration

Not expected to present an aspiration hazard.

# 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Sulphuric acid is harmful to aquatic life in very low concentrations. May cause corrosion and deterioration of many common materials found in the environment (eg steel, limestone).

## 12.2 Persistence and degradability

Sulfuric acid is a strong mineral acid that dissociates readily in water to sulfate ions and hydrated protons, and is totally miscible with water.

#### 12.3 Bioaccumulative potential

Sulphuric acid is not anticipated to accumulate in living tissues.

#### 12.4 Mobility in soil

Sulphuric acid is miscible with water and its dilution will increase the velocity of downward movement in the soil where it may dissolve the soil material.

#### 12.5 Other adverse effects

No information provided.

# 13. DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

Waste disposal Wearing the protective equipment detailed above, neutralise to pH 6-8 by SLOW addition to a saturated

sodium bicarbonate solution or similar basic solution. Dilute with excess water and flush to drain. Waste

disposal should only be undertaken in a well ventilated area.

**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	1830	1830	1830
14.2 Proper Shipping Name	SULFURIC ACID with more than 51% acid	SULFURIC ACID with more than 51% acid	SULFURIC ACID with more than 51% acid
14.3 Transport Hazard Class	8	8	8
14.4 Packing Group	II	II	II

## 14.5 Environmental hazards Not a Marine Pollutant

# 14.6 Special precautions for user

 Hazchem code
 2P

 GTEPG
 8A1

 EMS
 F-A, S-B



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## 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 Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and

Labelling of Chemicals.

The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous

Substances [NOHSC: 1008(2004)].

Hazard codes C Corrosive

**Risk phrases** R35 Causes severe burns.

Safety phrases S1/2 Keep locked up and out of reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S30 Never add water to this product.

S37/39 Wear suitable gloves and eye/face protection.

S45 In case of accident or if you feel unwell seek medical advice immediately (show the label

where possible).

Inventory listing(s) 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.

### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as 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: 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.



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Abbreviations ACGIH American Conference of Governmental Industrial Hygienists

CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds

CNS Central Nervous System

EC No. EC No - European Community Number

EMS Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous

Goods)

GHS Globally Harmonized System

GTEPG Group Text Emergency Procedure Guide
IARC International Agency for Research on Cancer

LC50 Lethal Concentration, 50% / Median Lethal Concentration

LD50 Lethal Dose, 50% / Median Lethal Dose

mg/m³ Milligrams per Cubic Metre
OEL Occupational Exposure Limit

pH relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly

alkaline).

ppm Parts Per Million

STEL Short-Term Exposure Limit

STOT-RE Specific target organ toxicity (repeated exposure)
STOT-SE Specific target organ toxicity (single exposure)

SUSMP Standard for the Uniform Scheduling of Medicines and Poisons

SWA Safe Work Australia
TLV Threshold Limit Value
TWA 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.

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