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**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

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**1.1 Product identifier**

**Product name**            **SULPHURIC ACID 60%**  
**Synonyms**                60% SULPHURIC ACID • SULFURIC ACID 60% • SULFURIC ACID 60% TECHNICAL

**1.2 Uses and uses advised against**

**Uses**                        INDUSTRIAL APPLICATIONS • SPECIALTY CHEMICAL • SURFACE FINISHING

**1.3 Details of the supplier of the product**

**Supplier name**            **DUBOIS CHEMICALS AUSTRALIA PTY LIMITED**  
**Address**                    305 Frankston Dandenong Rd, Dandenong South, VIC, 3175, AUSTRALIA  
**Telephone**                (03) 9768 3860  
**Email**                      [sales@duboischemicals.com.au](mailto:sales@duboischemicals.com.au)  
**Website**                    <http://duboischemicals.com.au/>

**1.4 Emergency telephone numbers**

**Emergency**                13 11 26 (Poisons Information Centre)

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**2. HAZARDS IDENTIFICATION**

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**2.1 Classification of the substance or mixture**

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

**Physical Hazards**

Corrosive to Metals: Category 1

**Health Hazards**

Skin Corrosion/Irritation: Category 1A  
Serious Eye Damage / Eye Irritation: Category 1

**Environmental Hazards**

Not classified as an Environmental Hazard

**2.2 GHS Label elements**

**Signal word**                **DANGER**

**Pictograms****Hazard statements**

H290                        May be corrosive to metals.  
H314                        Causes severe skin burns and eye damage.  
H318                        Causes serious eye damage.

**Prevention statements**

P234                        Keep only in original packaging.  
P264                        Wash thoroughly after handling.  
P280                        Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

**PRODUCT NAME   SULPHURIC ACID 60%****Response statements**

P301 + P330 + P331   IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353   IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
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 CENTRE or doctor/physician.  
P363                    Wash contaminated clothing before reuse.  
P390                    Absorb spillage to prevent material damage.

**Storage statements**

P406                    Store in corrosive resistant container with a resistant inner liner.

**Disposal statements**

None allocated.

**2.3 Other hazards**

No information provided.

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**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

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**3.1 Substances / Mixtures**

Ingredient	CAS Number	EC Number	Content
SULPHURIC ACID	7664-93-9	231-639-5	60%
ADDITIVE(S)	-	-	Remainder

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**4. FIRST AID MEASURES**

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**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.

**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 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 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 tracheostomy 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.

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**5. FIRE FIGHTING MEASURES**

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**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**

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**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.

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**7. HANDLING AND STORAGE**

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**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 uses**

No information provided.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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**8.1 Control parameters****Exposure standards**

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Sulphuric acid	SWA [AUS]	--	1	--	3
Sulphuric acid	SWA [Proposed]	--	0.1	--	--

**Biological limits**

No biological limit values have been entered for this product.

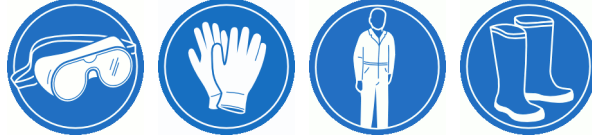
**8.2 Exposure controls**

**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.

**PRODUCT NAME    SULPHURIC ACID 60%**

**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 safety boots and 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-Class P2 (Inorganic gases/vapors and Particulate) respirator. If spraying, with prolonged use, or if in confined areas, wear an Air-line respirator.



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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	COLOURLESS LIQUID
<b>Odour</b>	SLIGHT ODOUR
<b>Flammability</b>	NON FLAMMABLE
<b>Flash point</b>	NOT RELEVANT
<b>Boiling point</b>	NOT AVAILABLE
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	< 1
<b>Vapour density</b>	NOT AVAILABLE
<b>Relative density</b>	1.275
<b>Solubility (water)</b>	SOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT RELEVANT
<b>Lower explosion limit</b>	NOT RELEVANT
<b>Partition coefficient</b>	NOT AVAILABLE
<b>Autoignition temperature</b>	NOT AVAILABLE
<b>Decomposition temperature</b>	NOT AVAILABLE
<b>Viscosity</b>	NOT AVAILABLE
<b>Explosive properties</b>	NOT AVAILABLE
<b>Oxidising properties</b>	NOT AVAILABLE
<b>Odour threshold</b>	NOT AVAILABLE

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**10. STABILITY AND REACTIVITY**

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**10.1 Reactivity**

May be corrosive to metals.

**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.

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**11. TOXICOLOGICAL INFORMATION**

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**PRODUCT NAME    SULPHURIC ACID 60%****11.1 Information on toxicological effects**

**Acute toxicity**            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 ingredients:**

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
SULPHURIC ACID	2140 mg/kg (rat)	--	18 mg/m <sup>3</sup> (guinea pig); 510 mg/m <sup>3</sup> /2hrs (rat)

**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).

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

**Aspiration**                Not expected to present an aspiration hazard.

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**12. ECOLOGICAL INFORMATION**

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**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**

Avoid contaminating waterways.

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**13. DISPOSAL CONSIDERATIONS**

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**13.1 Waste treatment methods**

**Waste disposal**            For small amounts (as determined by risk assessment or similar): 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. For larger amounts: Dispose in accordance with local regulations.

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

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**14. TRANSPORT INFORMATION**

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



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
<b>14.1 UN Number</b>	1830	1830	1830
<b>14.2 Proper Shipping Name</b>	SULFURIC ACID with more than 51% acid	SULFURIC ACID with more than 51% acid	SULFURIC ACID with more than 51% acid
<b>14.3 Transport hazard class</b>	8	8	8
<b>14.4 Packing Group</b>	II	II	II

**14.5 Environmental hazards**

Not a Marine Pollutant.

**14.6 Special precautions for user**

Hazchem code 2P  
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 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** 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 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.

**PRODUCT NAME    SULPHURIC ACID 60%**

**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/m <sup>3</sup>	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.

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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