Infosafe No™	1CH72	Issue Date : April 2018	RE-ISSUED by ACR

Product Name : **SULFURIC ACID 52-98%**

Classified as hazardous

1. Identification

GHS Product Identifier: SULFURIC ACID 52-98%

Company Name: AUSTRALIAN CHEMICAL REAGENTS (ACR) (ABN 19 008 264 211)

Address: 38 - 50 Bedford Street Gillman
S.A. 5013 Australia

Telephone/Fax Number: Tel: (08) 8440 2000
Fax: (08) 8440 2001

Recommended use of the chemical and restrictions on use: Manufacture of phosphate and ammonium sulfate fertilizers; production of rayon and other textile fibres, film, inorganic pigments, nitrate explosives, alcohols, plastics, dyes, drugs, synthetic detergents, natural and synthetic rubber, pulp and paper, cellulosics and catalysts; manufacture of hydrochloric and hydrofluoric acids, aluminium and copper sulfate and chromium chemicals; petroleum refining; pickling iron, steel and other metals; leaching agent for ores; electroplating baths; alkylation catalyst; component of lead storage batteries and laboratory reagent.

Other Names

Name	Product Code
SULFURIC ACID 75% w/w	2755
SULFURIC ACID 85% w/v	5491

Other Information: EMERGENCY CONTACT NUMBER: +61 08 8440 2000
Business hours: 8:30am to 5:00pm, Monday to Friday.

Australian Chemical Reagents (ACR) does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Australian Chemical Reagents (ACR) with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Australian Chemical Reagents (ACR) is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

2. Hazard Identification

GHS classification of the substance/mixture: Skin Corrosion/Irritation: Category 1A
Corrosive to Metals: Category 1

Signal Word (s): DANGER

Hazard Statement (s): H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Pictogram (s): Corrosion

Precautionary statement – Prevention: P234 Keep only in original container.
P260 Do not breathe fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response: 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 victim 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 do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.

Precautionary statement – Storage: P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

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Precautionary statement – Disposal	P501 Dispose of contents/container to an approved waste disposal plant.

3. Composition/information on ingredients

Chemical Characterization Liquid

Ingredients

Name	CAS	Proportion	Hazard Symbol	Risk Phrase
Sulfuric acid	7664-93-9	52-98 %		
Water	7732-18-5	2-48 %		

4. First-aid measures

Inhalation	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Immediately obtain medical aid if cough or other symptoms appear.
Ingestion	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.
Skin	Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek immediate medical advice /attention depending on the severity.
Eye contact	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Take care not to rinse contaminated water into the non-affected eye. Seek immediate medical assistance.
First Aid Facilities	Maintain eyewash fountain and drench facilities and normal washroom in work area.
Advice to Doctor	Treat symptomatically as for strong acids.
Protection for First Aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.
Other Information	For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Hazards from Combustion Products	Highly irritating/toxic gases and fumes, including toxic oxides of sulfur (SOx). Will react with water or steam to produce toxic and corrosive fumes and heat. Reacts with carbonates to generate carbon dioxide gas. Reacts with cyanides and sulfides to form poisonous hydrogen cyanide and hydrogen sulfide respectively. Hydrogen may form upon contact with metals (danger of explosion!).
Specific Methods	Use extinguishing media most appropriate for the surrounding fire. When material is not involved in fire: Do not use water on material itself.
Specific hazards arising from the chemical	Does not burn but may produce poisonous and/or corrosive fumes upon heating. Heat of reaction may be enough to ignite combustible materials. Will react with water (some violently) releasing flammable, poisonous and/or corrosive gases and runoff. Contact with metals may evolve flammable hydrogen gas. Fire may produce irritating, poisonous and/or corrosive gases. Runoff may pollute waterways. May be transported in a molten form. Containers may explode when heated or contaminated with water.
Hazchem Code	2P
Decomposition Temp.	340 °C (100%).
Precautions in connection with Fire	Wear SCBA and acid-resistant chemical splash suit. Structural firefighter's uniform is NOT effective for these materials.

6. Accidental release measures

Spills & Disposal	Neutralise with lime or sodium carbonate, adjust the pH to 6-10. For larger spills notify Emergency Services.
Personal Precautions	Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing. Use personal protective equipment listed in Section 8.
Clean-up Methods - Small Spillages	Absorb or contain liquid with sand, earth or spill control material. Shovel up using non sparking tools and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum. Absorb or contain liquid with sand, earth or spill control material, or neutralise with sodium carbonate or other alkali material.

Clean-up Methods - Large Spillages	Seek expert advice on handling and disposal.
Environmental Precautions	Do not discharge into drains, surface water or ground water. Do not discharge to subsoil/soil.

7. Handling and storage

Precautions for Safe Handling	Avoid ingestion and inhalation of gas/fumes/vapour/spray mist. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Keep locked up. Keep containers closed when not in use. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Wear suitable protective clothing. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Inform laundry personnel of contaminant's hazards. Discard contaminated shoes. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities. Contact with water will generate heat. When diluting, always add the acid to water; never add water to the acid. Do not allow water to get into the container because of violent reaction. Keep away from incompatibles such as oxidizing agents, reducing agents, combustible materials, organic materials, metals, acids, alkalis, moisture.
Conditions for safe storage, including any incompatabilities	Ideally, sulfuric acid should be stored in isolation from all other chemicals in an approved acid or corrosives safety cabinet. Accessible only for authorized persons. Store in tightly closed containers, in a cool, dry, well-ventilated area with acid resistant floors and good drainage. Hygroscopic. Do not allow contact with water. Reacts violently with water. Protect against physical damage, freezing, direct sunlight and moisture. Store away from incompatible materials and water. May corrode metallic surfaces. Separate from acids, alkalis, oxidizing agents, reducing agents, combustibles, sources of ignition and heat. Do not wash out container and use it for other purposes. Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid); observe all warnings and precautions listed for the product. Inspect regularly for deficiencies such as damage or leaks.
Corrosiveness	Very corrosive to most metals including cast iron, steel, stainless steel, brass, aluminium, titanium, nickel and some alloys. The corrosivity of sulfuric acid solutions depends on factors such as concentration, temperature and acid impurities. The resistance of alloys to sulfuric acid corrosion increases with increasing chromium, molybdenum, copper and silicon content. Many plastics do not resist concentrated acid well (greater than 50-60%). Teflon is the only common plastic that resists all acid concentrations.
Storage Regulations	Refer Australian Standard AS 3780-1994 'The storage and handling of corrosive substances'.
Storage Temperatures	Store at room temperature (15 to 23 °C recommended).

8. Exposure controls/personal protection

Occupational exposure limit values

Name	STEL		TWA		
	mg/m3	ppm	mg/m3	ppm	Footnote
Sulfuric acid	3		1		

Other Exposure Information	A time weighted average (TWA) has been established for Sulphuric acid (Safe Work Australia) of 1 mg/m³. The corresponding STEL level is 3 mg/m³. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.
Appropriate engineering controls	Provide sufficient ventilation to ensure that the working environment is below the TWA (time weighted average).In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.
Respiratory Protection	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing vapours or mists. Select and use respirators in accordance with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist filters. Filter capacity and respirator type depends on exposure levels.
Eye Protection	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate.

Hand Protection	Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336. Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: Excellent: Vinyl gloves. Good: Neoprene or nitrile rubber gloves. Fair: NR latex. (52-75%) Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste. Fair: Nitrile gloves. Poor: NR latex, vinyl, or neoprene gloves. (75-98%)
Personal Protective Equipment	Final choice of personal protective equipment will depend on individual circumstances and/or according to risk assessments undertaken.
Footwear	Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.
Body Protection	Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
Hygiene Measures	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Form	Liquid
Appearance	Clear, colourless, viscous (thick oily) liquid when pure, but yellowish to brownish when impure.
Odour	Odourless, but has a choking odour if heated.
Decomposition Temperature	340 °C (100%).
Melting Point	-32.3 °C (52%); -29.5 °C (60%); -38 °C (67%); -4.5 °C (79%); 3 °C (81%); -6.5 °C (90%); -11.5 °C (91%); -1.1 °C (98%).
Boiling Point	126 °C (52%); 140 °C (60%); 156 °C (67%); 197 °C (79%); 207 °C (81%); 255 °C (90%); 262 °C (91%); 327.2 °C (98%).
Solubility in Water	Miscible (Soluble) in all proportions. CAUTION: Always add the acid to water. Exothermic reaction with water. Addition to water generates significant heat. Addition of water can generate localised boiling and spattering.
Solubility in Organic Solvents	Soluble in all proportions in ethanol (decomposes).
Specific Gravity	1.42 (52%); 1.5 (60%); 1.58 (67%); 1.72 (79%); 1.74 (81%); 1.82 (90%); 1.826 (91%); 1.8437 (98%).
pH	Strongly acidic. 1 N solution (~5% w/w) = 0.3; 0.1 N solution (~0.5% w/w) = 1.2; 0.01 N solution (~0.05% w/w) = 2.1.
Vapour Pressure	<0.04 kPa (0.3 mmHg) at 25 °C (100%).
Vapour Density (Air=1)	The highest known value is 3.4 (Air = 1 at boiling point of sulfuric acid) (100% Sulfuric acid). Weighted average: 2.71 (Air = 1) (75% (v/v)); 2.92 (Air = 1) (82.6%).
Evaporation Rate	Probably very slow.
Odour Threshold	>1 ppm (Sulfuric acid 100%).
Viscosity	25 centipoises (25 mPa.s) at 25 °C (100%).
Surface Tension	50 dynes/cm at 25 °C (100%).
Flammability	Non combustible material. This material increases the risk of fire and may aid combustion. Strong dehydrating agent which may cause ignition of combustible/organic/finely divided/other materials on contact. Contact with moisture/water, or with strong alkalies may generate heat. Flammable hydrogen gas may be produced on prolonged contact with metals such as aluminium, tin, lead and zinc.
Explosion Properties	Contact with most metals causes formation of flammable and explosive hydrogen gas. Exothermic reaction with water. Containers may explode when heated or if contaminated with water. Slightly explosive in presence of oxidizing materials. Mixtures of sulfuric acid and any of the following can explode: p-nitrotoluene, pentasilver trihydroxydiaminophosphate, perchlorates, alcohols with strong hydrogen peroxide, ammonium tetraperoxychromate, mercuric nitrite, potassium chlorate, potassium permanganate with potassium chloride, carbides, nitro compounds, nitrates, carbides, phosphorous, iodides, picrates, fulminates, dienes, alcohols (when heated). Nitramide decomposes explosively on contact with concentrated sulfuric acid. 1,3,5-Trinitrosohexahydro-1,3,5-triazine + sulfuric acid causes explosive decomposition.
Molecular Weight	98.08
Saturated Vapour Concentration	< 395 ppm (0.04%) at 25 °C (calculated) (100% sulfuric acid).
Other Information	Taste: Strong, marked acid taste.

Conversion Factor: 1 ppm = 4 mg/m³; 1 mg/m³ = 0.25 ppm at 25 °C (calculated).
Critical Temperature: Approx. 670 °C (93%); approx. 655 °C (100%).

10. Stability and reactivity

Chemical Stability Stable under normal temperatures pressures and conditions of storage and handling. Concentrated solutions (>90%) react violently with water, spattering and liberating heat.

Conditions to Avoid Exposure to moist air, moisture, or water (Note: Use great caution in mixing with water due to heat evolution that causes explosive spattering. Always add the acid to water, never the reverse.), metals, excess heat, combustible materials, organic materials, oxidizers, amines, bases and incompatible materials.

Incompatible Materials Water, combustible materials, oxidizing agents, reducing agents, metals as powders, metals as non powders (yields hydrogen gas), metal alloys, metal compounds, acids, alkalis, organic materials, organic solvents, alkali metals, alkaline earth metals, alkaline earth compounds, alkali hydroxides solutions, chlorates, perchlorates, permanganates, carbides, cyanides, nitrides, sulfides, fulminates, picrates, nitrates, nitriles, halogens, halogen-halogen compounds, salts of oxyhalogenic acids, acetylides, oxides and hydrides, anilines, organic nitro compounds, peroxi compounds, acetic anhydride, acetone cyanhydrin, acetone + nitric acid, acetone + potassium dichromate, acrolein, allyl alcohol, allyl chloride, 2-aminoethanol, ammonia, ammonium triperchromate, n-butyraldehyde, diisobutylene, epichlorohydrin, ethylene cyanohydrin, ethylene diamine, ethylene glycol, ethylenimine, isoprene, lithium silicide, pentasilver trihydroxydiaminophosphate, phosphorus, phosphorus isocyanate, beta-propiolactone, and pyridine.

Hazardous Decomposition Products Irritating and highly toxic fumes and gases, including oxides of sulfur. Reaction with water or steam may generate much heat which will increase the concentration of fumes in the air, and may produce toxic and corrosive fumes. Contact with most metals causes formation of flammable and explosive hydrogen gas.

Possibility of hazardous reactions Very reactive substance. Concentrated solutions (>90%) react violently with water, spattering and liberating heat. Corrosively attacks most metals liberating flammable hydrogen gas, (potential explosion). The concentrated acid oxidizes, dehydrates, or sulfonates most organic compounds. Sulfuric acid reacts vigorously, violently or explosively with many organic and inorganic chemicals including water, acrylonitrile, alkali solutions, carbides, chlorates, fulminates, nitrates, perchlorates, permanganates, picrates, powdered metals, metal acetylides or carbides, epichlorohydrin, aniline, ethylenediamine, alcohols with strong hydrogen peroxide, chlorosulfonic acid, cyclopentadiene, hydrofluoric acid, nitromethane, 4-nitrotoluene, phosphorus (III) oxide, potassium, sodium, ethylene glycol, isoprene, styrene. Acetaldehyde and allyl chloride may polymerize violently in the presence of sulfuric acid. Many plastics do not resist concentrated acid well (greater than 50-60%). Hazardous gases, such as hydrogen cyanide, hydrogen sulfide and acetylene, are evolved on contact with chemicals such as cyanides, sulfides and carbides. Reacts with carbonates to generate carbon dioxide gas.

Hazardous Polymerization Acetaldehyde and allyl chloride may polymerize violently in the presence of sulfuric acid.

11. Toxicological Information

Ingestion Corrosive. Harmful if swallowed. Ingestion can cause severe burns to the mouth, throat, oesophagus and stomach and permanent damage to the digestive tract, resulting in discomfort and severe pain, extensive tissue damage, the danger of perforation of esophagus and stomach, gastrointestinal bleeding, oedema of the glottis, necrosis and scarring, and in severe cases, collapse and death. Symptoms may include sore throat, difficulty swallowing, intense thirst, general feeling of sickness, nausea, vomiting, diarrhoea, severe swelling of the larynx and skeletal paralysis affecting the ability to breathe, circulatory collapse, with clammy skin, weak and rapid pulse, shallow respiration, scanty urine, circulatory shock and convulsions and subsequent death. Circulatory shock is often the immediate cause of death. It may also cause systemic toxicity with acidosis. Small amounts of acid which may enter the lungs during ingestion or vomiting (aspiration) can cause serious lung injury and death. After a latency period of several weeks, possibly pyloric stenosis.

Inhalation Corrosive. Harmful if inhaled. Because its vapour pressure is negligible, it exists in the air only as a mist or spray. Inhalation of mists, aerosols or sprays can cause severe irritation or corrosive damage to the respiratory tract and mucous membranes with sore throat, burning pain in the nose and throat, coughing, wheezing, laryngitis, bronchitis, shortness of breath, laboured breathing, dental erosion, headache, nausea, and vomiting. Exposure may impair lung function and cause mucostasis (reduced mucous clearance). The degree and severity of respiratory effects are influenced by factors such as the physical state and particle size of the aerosol, deposition site, concentration and humidity. Long term lung damage may result from a severe short term exposure. Inhalation may be fatal as a result of spasm, inflammation, oedema of the larynx and bronchi, chemical pneumonitis, and delayed pulmonary

	oedema. The symptoms of pulmonary oedema, including coughing and shortness of breath, can be delayed until hours or days after the exposure and are aggravated by physical exertion. May affect cardiovascular system (hypotension, depressed cardiac output, bradycardia). Circulatory collapse with clammy skin, weak and rapid pulse, shallow respiration, and scanty urine may follow. Circulatory shock is often the immediate cause of death.
Skin	Corrosive. Causes severe skin irritation and burns, which may result in permanent scarring. Burns may be 2nd or 3rd degree. Extensive acid burns can result in death. Symptoms of redness, irritation, pain, blistering, tissue destruction, scabs, sloughs, local necrosis, and membrane ulceration can occur. Continued contact can cause tissue necrosis. High mist or aerosol concentrations may cause redness, irritation and burns to the skin if contact is prolonged. The severity of injury depends on the concentration of the solution and the duration of exposure. May be harmful if absorbed through the skin. May cause circulatory collapse with clammy skin, weak and rapid pulse, shallow respirations, and scanty urine. Circulatory shock is often the immediate cause of death.
Eye	Corrosive. Causes severe eye irritation and severe eye burns. Contact can cause blurred vision, redness, swelling, pain, corneal lesions, permanent corneal opacification and irreversible eye injury, including blindness. Risk of serious damage to eyes. The severity of injury depends on the concentration of the solution and the duration of exposure. Sulfuric acid mists and aerosols are expected to be irritating.
Carcinogenicity	Occupational exposure to strong-inorganic-acid mists containing sulfuric acid is evaluated in the IARC Monographs (Vol. 54; 1992) as Group 1: Carcinogenic to humans.
Chronic Effects	Prolonged or repeated inhalation may affect behaviour (muscle contraction or spasticity), urinary system (kidney damage), and cardiovascular system, heart (chest pain, ischemic heart lesions), and respiratory system/lungs (nosebleeds, nasal congestion, perforation of the nasal septum, bronchial hyperreactivity, bronchitis, pulmonary oedema, lung damage), teeth (dental discoloration, erosion). Exposures to high concentrations (reportedly up to 16 mg/m³) cause dental erosion. Etching of teeth may occur after a few weeks exposure, progressing to erosion after a few months exposure. Dental etching and erosion occurred about 4 times as frequently in a high exposure group (over 0.3 mg/m³) compared to a low exposure group (below 0.07 mg/m³). Prolonged or repeated exposure to sulfuric acid mists may cause various lesions of the skin, tracheobronchitis, stomatitis, conjunctivitis, or gastritis. Prolonged or repeated skin contact may cause dermatitis (red, itchy, dry skin), an allergic skin reaction. Prolonged or repeated eye contact may cause conjunctivitis. Effects may be delayed. Occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic to humans.
Respiratory Irritation	Human volunteers exposed to sulfuric acid for 5-15 minutes noticed no odour, or irritation below 1 mg/m³. All volunteers noticed the exposure at 3 mg/m³ and at 5 mg/m³ some people found it objectionable. A deep breath usually produced coughing and respiratory changes were reported. Tolerance to sulfuric acid can occur. In another study, volunteers exposed to high levels (39 mg/m³ dry mist and 21 mg/m³ wet mist sulfuric acid) for 1/2-1 hour reported severe symptoms of irritation of the upper airways and signs of bronchial obstruction. These symptoms persisted for several days in two volunteers. Occupational exposure to sulfuric acid fumes in a closed space, produced injury to the upper airways, and fluid accumulation and bleeding in the lungs to one worker. Most lung function tests had returned to normal after 6 weeks.

12. Ecological information

Ecotoxicity	Harmful effect on aquatic organisms. Harmful effect due to pH shift. Toxic effect on fish and algae. Does not cause biological oxygen deficit. Endangers drinking-water supplies if allowed to enter soil and/or waters in large quantities. Neutralization possible in waste water treatment plants.
Persistence and degradability	Methods for the determination of biodegradability are not applicable to inorganic substances.
Environmental Protection	Do not allow to enter waters, waste water, or soil!
Acute Toxicity - Fish	L. macrochirus LC50: 16-29 mg/l/ 96 h.
Acute Toxicity - Daphnia	Daphnia magna EC50: 29 mg/l /24 h (calculated on the pure substance).

13. Disposal considerations

Disposal Considerations	Dispose of according to relevant local, state and federal government regulations.
Waste Disposal	Neutralise remaining product with lime or soda ash, adjusting pH to 6-10. Flush to sewer as a greatly diluted solution.

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14. Transport information

Transport Information	Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following: Class 1, Class 4.3, Class 5, Class 6, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids, Class 7; and are incompatible with food and food packaging in any quantity.
U.N. Number	1830
UN proper shipping name	SULFURIC ACID
Transport hazard class(es)	8
Hazchem Code	2P
Packaging Method	3.8.8RT8
Packing Group	II
EPG Number	8A2
IERG Number	40

15. Regulatory information

Regulatory Information	Listed in the Australian Inventory of Chemical Substances (AICS). Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Poisons Schedule	S6

16. Other Information

Literature References	'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia. Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997. National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007. Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', 2011. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 2010. Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]'. Safe Work Australia, 'Hazardous Substances Information System, 2005'. Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances (2011)'. Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995) 3rd Edition]'.
Contact Person/Point	Paul McCarthy Ph. (08) 8440 2000 DISCLAIMER STATEMENT: All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. Australian Chemical Reagents (ACR) accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.
Empirical Formula & Structural Formula	H2SO4 (pure substance)

...End Of MSDS...