

SDS No: 727 Version: V.0.0.5

# No Fume Acid 34%

## Cromag Pty Ltd

## Safety Data Sheet according to WHS and ADG requirements

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### **Product Identifier**

Product name	TelChem No Fume Acid / Sigma Shires No Fume 34%
Chemical Name	Sulphuric Acid 34%
Synonyms	Liquid Pool Acid
Proper shipping name	SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID
Chemical formula	H <sub>2</sub> SO <sub>4</sub>
Other means of identification	Not Available

### Relevant identified uses of the substance or mixture and uses advised against

Relevant Identified Uses	Fertiliser production of Superphosphate, Mining for heap leaching, Chemical manufacturing of numerous
	compounds, Batteries, Swimming pool pH adjustment, Metal cleaning, Electroplating, Dyes.

#### Details of the supplier of the safety data sheet

Company Name	Cromag Pty Ltd trading as Telford Industries and Sigma Chemicals	
Address	7 Valentine Street Kewdale WA 6105 Australia	
Telephone	+61 8 9353 2053	
Website	www.telfordindustries.com.au / www.sigmachemicals.com.au	
Email	info@telfordindustries.com.au / info@sigmachemicals.com.au	

#### **Emergency telephone number**

Association/Organisation	Not Available
Emergency telephone numbers	DFES: 000 (HAZMAT EMERGENCIES)
Other Emergency telephone numbers	POISONS: 13 11 26

### SECTION 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

#### HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	S6
Classification	Metal Corrosion Category 1, Skin Corrosion/Irritation Category 1A, Serious Eye Damage Category 1
Label Elements	

GHS label elements	
SIGNAL WORD	DANGER



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## Hazard statement(s)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.

### **Precautionary statement(s) Prevention**

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P234	Keep only in original container.

### Precautionary statement(s) 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.
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.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

### Precautionary statement(s) Storage

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

### Precautionary statement(s) Disposal

P501

Dispose of contents/container in accordance with local regulations.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### Substances

CAS No	% [weight]	Name
7664-93-9	34	sulphuric acid
7732-18-5	66	water



## **SECTION 4 FIRST AID MEASURES**

#### Description of first aid measures

	If this product comes in contact with the eyes:
	Immediately hold eyelids apart and flush the eye continuously with running water.
	Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the
Eve Contest	eyelids by occasionally lifting the upper and lower lids.
Eye Contact	Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15
	minutes.
	Transport to hospital or doctor without delay.
	Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
	If skin or hair contact occurs:
	Immediately flush body and clothes with large amounts of water, using safety shower if available.
	Quickly remove all contaminated clothing, including footwear.
Skin Contact	> Wash skin and hair with running water. Continue flushing with water until advised to stop by the
	Poisons Information Centre.
	Transport to hospital, or doctor.
	If fumes or combustion products are inhaled remove from contaminated area.
	Lay patient down. Keep warm and rested.
	Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to
Inhalation	initiating first aid procedures.
	> Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask
	device, or pocket mask as trained. Perform CPR if necessary.
	Transport to hospital, or doctor, without delay.
	For advice, contact a Poisons Information Centre or a doctor at once.
	Urgent hospital treatment is likely to be needed.
	If swallowed do NOT induce vomiting.
	If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to
	maintain open airway and prevent aspiration.
Ingestion	Observe the patient carefully.
-	Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming
	unconscious.
	Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably
	drink.
	> Transport to hospital or doctor without delay.

#### Indication of any immediate medical attention and special treatment needed

#### Treat symptomatically.

For acute or short term repeated exposures to strong acids:

- > Airway problems may arise from laryngeal edema and inhalation exposure. Treat with 100% oxygen initially.
- Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
- Strong acids produce a coagulation necrosis characterised by formation of a coagulum (eschar) as a result of the desiccating action of the acid on proteins in specific tissues.

INGESTION:

- > Immediate dilution (milk or water) within 30 minutes post ingestion is recommended.
- > DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury.
- > Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.
- Charcoal has no place in acid management.
- > Some authors suggest the use of lavage within 1 hour of ingestion.

SKIN:

- > Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping.
- > Deep second-degree burns may benefit from topical silver sulfadiazine.

EYE:

- > Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjuctival cul-de-sacs. Irrigation should last at least 20-30 minutes.
- > DO NOT use neutralising agents or any other additives. Several litres of saline are required.
- Cycloplegic drops, (1% cyclopentolate for short-term use or 5% homatropine for longer term use) antibiotic drops, vasoconstrictive agents or artificial tears may be indicated dependent on the severity of the injury.
- > Steroid eye drops should only be administered with the approval of a consulting ophthalmologist).

[Ellenhorn and Barceloux: Medical Toxicology]



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### SECTION 5 FIREFIGHTING MEASURES

### **Extinguishing Media**

- Water spray or fog
- Foam

## Special hazards arising from the substrate or mixture

Fire Incompatibility De	Decomposition may produce toxic fumes of sulphur oxides (SOx)
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### Advice for firefighters

	> Alast Fire Drigodo and tell them location and poture of beyond				
	Alert Fire Brigade and tell them location and nature of hazard.				
	May be violently or explosively reactive.				
	Wear full body protective clothing with breathing apparatus.				
	Prevent, by any means available, spillage from entering drains or water course.				
	<ul> <li>Consider evacuation (or protect in place).</li> </ul>				
Fire Fighting	Use water delivered as a fine spray to control fire and cool adjacent area.				
	Avoid spraying water onto liquid pools.				
	> Do not approach containers suspected to be hot.				
	Cool fire exposed containers with water spray from a protected location.				
	If safe to do so, remove containers from path of fire.				
	Equipment should be thoroughly decontaminated after use.				
	Non combustible.				
	Not considered to be a significant fire risk.				
	Acids may react with metals to produce hydrogen, a highly flammable and explosive gas.				
	> Heating may cause expansion or decomposition leading to violent rupture of containers.				
Fire/Explosion Hazard	> May emit corrosive, poisonous fumes. May emit acrid smoke.				
	Decomposition may produce toxic fumes of:				
	sulphur oxides (SOx)				
HAZCHEM	2R				

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

See section 8

#### **Environmental precautions**

See section 12

### Methods and material for containment and cleaning up

	> Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills
	before discharge or disposal of material.
	Check regularly for spills and leaks.
	> Clean up all spills immediately.
Minor Spills	Avoid breathing vapours and contact with skin and eyes.
	Control personal contact with the substance, by using protective equipment.
	Contain and absorb spill with sand, earth, inert material or vermiculite.
	> Wipe up.
	Place in a suitable, labelled container for waste disposal.
	Clear area of personnel and move upwind.
	Alert Fire Brigade and tell them location and nature of hazard.
	May be violently or explosively reactive.
Major Spills	Wear full body protective clothing with breathing apparatus.
	Prevent, by any means available, spillage from entering drains or water course.
	Stop leak if safe to do so.
	Contain spill with sand, earth or vermiculite.



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Þ	Collect recoverable product into labelled containers for recycling.
≻	Neutralise/decontaminate residue (see Section 13 for specific agent).
≻	Collect solid residues and seal in labelled drums for disposal.
≻	Wash area and prevent runoff into drains.
۶	After clean up operations, decontaminate and launder all protective clothing and equipment before
	storing and re-using.
≻	If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 HANDLING AND STORAGE

### Precautions for safe handling

	> DO NOT allow alething wet with material to atow in contact with akin			
	DO NOT allow clothing wet with material to stay in contact with skin			
	Avoid all personal contact, including inhalation.			
	Wear protective clothing when risk of exposure occurs.			
	> WARNING: To avoid violent reaction, ALWAYS add material to water and NEVER water to material.			
	Avoid smoking, naked lights or ignition sources.			
	Avoid contact with incompatible materials.			
	When handling, DO NOT eat, drink or smoke.			
Safe handling	Keep containers securely sealed when not in use.			
J	Avoid physical damage to containers.			
	Always wash hands with soap and water after handling.			
	Work clothes should be laundered separately. Launder contaminated clothing before re-use.			
	Use good occupational work practice.			
	Observe manufacturer's storage and handling recommendations contained within this SDS.			
	Atmosphere should be regularly checked against established exposure standards to ensure safe			
	working conditions are maintained.			
	Store in original containers.			
	Keep containers securely sealed.			
Other Information	Store in a cool, dry, well-ventilated area.			
	Store away from incompatible materials and foodstuff containers.			
	Protect containers against physical damage and check regularly for leaks.			

### Conditions for safe storage, including any incompatibilities

	<ul> <li>DO NOT use aluminium or galvanised containers</li> </ul>
	<ul> <li>Check regularly for spills and leaks</li> </ul>
	Lined metal can, lined metal pail/ can.
Suitable Container	<ul> <li>Plastic pail.</li> </ul>
	Polyliner drum.
	Packing as recommended by manufacturer.
	Check all containers are clearly labelled and free from leaks.
	Inorganic acids neutralise chemical bases (for example: amines and inorganic hydroxides) to form salts
	<ul> <li>neutralisation can generate dangerously large amounts of heat in small spaces.</li> </ul>
	The dissolution of inorganic acids in water or the dilution of their concentrated solutions with additional
	water may generate significant heat.
	The addition of water to inorganic acids often generates sufficient heat in the small region of mixing to
	cause some of the water to boil explosively. The resulting "bumping" can spatter the acid.
	Inorganic acids react with active metals, including such structural metals as aluminum and iron, to release hydrogen, a flammable gas.
	Inorganic acids react with cyanide compounds to release gaseous hydrogen cyanide.
Storage Incompatibility	Inorganic acids generate flammable and/or toxic gases in contact with dithiocarbamates, isocyanates,
	mercaptans, nitrides, nitriles, sulfides, and strong reducing agents. Additional gas-generating reactions occur with sulfites, nitrites, thiosulfates (to give H2S and SO3), dithionites (SO2), and even carbonates.
	Reacts vigorously with alkalis.
	Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive
	mixture with air.
	Strong oxidizer.
	Reacts with water or steam.
	<ul> <li>Contact with acids, organics, reducing agents (eg. amines), metallic powders and heat sources</li> </ul>
	produces toxic fumes of chlorine. May be decomposed by hot water releasing chlorine fumes.



## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### **Control parameters**

### **OCCUPATIONAL EXPOSURE LIMITS (OEL)**

### **INGREDIENT DATA**

Source	Ingredient	Material Name	TWA	STEL	Peak	Notes
Australia Exposure Standards	sulphuric acid	Sulphuric acid	1 mg/m3	3 mg/m3	Not Available	Not Available

### **EMERGENCY LIMITS**

Ingredient	Material Name	TEEL-1	TEEL-2	TEEL-3
sulphuric acid	Sulphuric acid	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
sulphuric acid	80 mg/m3	15 mg/m3
water	Not Available	Not Available

### MATERIAL DATA

#### **Exposure controls**

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well- designed engineering controls can be highly effective in protecting workers and will typically be independent of		
controis	worker interactions to provide this high level of protection.		
Personal Protection			
Eye and Face protection	<ul> <li>Safety glasses with imperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure.</li> <li>Chemical goggles whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted.</li> <li>Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes.</li> <li>Alternatively a gas mask may replace splash goggles and face shields.</li> </ul>		
Skin protection	See Hand protection below		
Hands/feet protection	<ul> <li>Elbow length PVC gloves</li> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> <li>When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.</li> <li>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</li> </ul>		
Body protection	See Other protection below		
Other protection	<ul> <li>Overalls.</li> <li>PVC Apron.</li> <li>PVC protective suit may be required if exposure severe.</li> <li>Eyewash unit.</li> <li>Ensure there is ready access to a safety shower.</li> </ul>		
Thermal hazards	Not Available		



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### **Respiratory protection**

Type B-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Appearance Clear brown colour acidic liquid with strong odour; miscible with water

Physical state	Liquid	Flash point (°C)	Not Applicable
Odour	Not Available	Evaporation rate	Not Available
Odour threshold	Not Available	Flammability	Not Applicable
Relative density (water=1)	1.25	Upper Explosive Limit (%)	Not Applicable
Colour	Colourless - slightly yellow	Lower Explosive Limit (%)	Not Applicable
pH (as supplied)	< 1	Vapour pressure (kPa)	Not Available
Melting point/Freezing point (°C)	Not Available	Solubility in water (g/L)	Miscible
Initial boiling point and boiling range (°C)	Not Available	Vapour density (Air = 1)	Not Available

## SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Contact with alkaline material liberates heat
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

## SECTION 11 TOXICOLOGICAL INFORMATION

#### Information on toxicological effects

	Acidic corrosives produce respiratory tract irritation with coughing, choking and mucous membrane damage.	
Inhaled	Symptoms of exposure may include dizziness, headache, nausea and weakness. Exposure to high	
	concentrations causes bronchitis and is characterised by the onset of hemorrhagic pulmonary oedema.	
	Ingestion of acidic corrosives may produce circumoral burns with a distinct discolouration of the mucous	
Ingestion	membranes of the mouth, throat and oesophagus. Immediate pain and difficulties in swallowing and speaking	
0	may also be evident.	
	Skin contact with acidic corrosives may result in pain and burns; these may be deep with distinct edges and may	
	heal slowly with the formation of scar tissue.	
	Skin contact with the material may damage the health of the individual; systemic effects may result following	
Skin Contact	absorption. Open cuts, abraded or irritated skin should not be exposed to this material	
	Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce	
	systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any	
	external damage is suitably protected.	
	When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-	
	four hours or more after instillation.	
Eye	Direct eye contact with acid corrosives may produce pain, lachrymation, photophobia and burns. Mild burns of	
	the epithelia generally recover rapidly and completely.	
	Repeated or prolonged exposure to acids may result in the erosion of teeth, inflammatory and ulcerative	
Chronic	changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of	
	bronchial pneumonia may ensue.	
	Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health	
	effects involving organs or biochemical systems.	



Product Name	ΤΟΧΙCITY	IRRITATION
TelChem No Fume	Not Available	Not Available
Acid	Inhalation (guinea pig) LC50: 0.018 mg/L/8hr <sup>[2]</sup>	Eye (rabbit): 1.38 mg SEVERE
	Inhalation (mouse) LC50: 0.32 mg/L/2hr <sup>[2]</sup>	Eye (rabbit): 5 mg/30sec SEVERE
Sulphuric Acid	Inhalation (rat) LC50: 0.51 mg/L/2hr <sup>[2]</sup>	
	Oral (rat) LD50: 2140 mg/kg <sup>[2]</sup>	
Water	Oral (rat) LD50: >90000 mg/kg <sup>[2]</sup>	Not Available

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.\* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS -Register of Toxic Effect of chemical Substances

Sulphuric Acid	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. WARNING: For inhalation exposure <u>ONLY</u> : This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS Occupational exposures to strong inorganic acid mists of sulphuric acid:
Sulphuric Acid & WATER	No significant acute toxicological data identified in literature search.

Acute Toxicity	$\checkmark$	Carcinogenicity	$\checkmark$
Skin Irritation/Corrosion	$\checkmark$	Reproductivity	0
Serious Eye Damage/Irritation	$\checkmark$	STOT – single exposure	0
Respiratory or Skin sensitisation	0	STOT – repeated exposure	0
Mutagenicity	0	Aspiration Hazard	0
Legend: X – Data	available but does not fill the criteria for	classification	

Data available but does not fill the criteria for classification

✓ – Data required to make classification available

 $\mathcal{O}-$  Data Not Available to make classification

## **SECTION 12 ECOLOGICAL INFORMATION**

### Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
sulphuric acid	LC50	96	Fish	8mg/L	1
sulphuric acid	EC50	48	Crustacean	42.5mg/L	1
sulphuric acid	EC50	240	Algae or other aquatic plants	2.5000mg/L	4
sulphuric acid	NOEC	7200	Fish	0.13mg/L	2
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

#### Ecotoxicity

Prevent, by any means available, spillage from entering drains or water courses. DO NOT discharge into sewer or waterways.



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### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
water	LOW	LOW

### Bio accumulative potential

Ingredient	Bioaccumulation
water	LOW (Log KOW = -1.38)

### Mobility in Soil

Ingredient	Mobility
water	LOW (KOC = 14.3)

## SECTION 13 DISPOSAL CONSIDERATIONS

### Waste treatment methods

	Containers may still present a chemical hazard/ danger when empty.
	Return to supplier for reuse/ recycling if possible.
	Otherwise:
	If container can't be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
Product/Packaging disposal	Where possible retain label warnings and SDS and observe all notices pertaining to the product.
	Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
	Treat and neutralise at an approved treatment plant. Treatment should involve: Neutralisation with soda-ash or soda-lime followed by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).
	Decontaminate empty containers with 5% aqueous sodium hydroxide or soda ash, followed by water. Observe all label safeguards until containers are cleaned and destroyed.

### **SECTION 14 TRANSPORT INFORMATION**

#### **Labels Required**

Marine Pollutant	NO
HAZCHEM	2R

### Land transport (ADG)

UN Number	2796		
UN proper shipping name	SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID		
Transact Harvard alass (as)	Class	8	
Transport Hazard class(es)	Sub Risk	Not Applicable	
Packing group	II		
Environmental Hazard	Not Applicable		
Special precautions for user	Special provisions	Not Applicable	
	Limited quantity	1 L	



### Air transport (ICAO-IATA / DGR)

UN Number	2796			
UN proper shipping name	SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID			
The man and the sector (sec)	ICAO/IATA Class	8		
Transport Hazard class(es)	ICAO/IATA Sub Risk	Not Applicable		
Packing group	Ш	I		
Environmental Hazard	Not Applicable			
	Special provisions	Not Applicable		
	Cargo Only Packing Instructions	Not Available		
	Cargo Only Maximum Qty/Pack	Not Available		
Special precautions for user	Passenger and Cargo Packing Instructions	851		
	Passenger and Cargo Maximum Qty/Pack	1 L		
	Passenger and Cargo Limited Quantity Packing Instructions	Y840		
	Passenger and Cargo Limited Maximum Qty / Pack	0.5 L		

#### Sea transport (IMDG-Code / GGVSee)

UN Number	2796		
UN proper shipping name	SULPHURIC ACID with not more than 51% acid or BATTERY FLUID, ACID		
Transport Hazard class(es)	IMDG Class	8	
	IMDG Sub Risk	Not Applicable	
Packing group	11		
Environmental Hazard	Not Applicable		
Special precautions for user	EMS, Fire	F-A	
	EMS, Spillage	S-B	

#### Transport in bulk according to Annex II of MARPOL and the IBC code

Source	Product Name	Pollution Category	Ship Type
IMO MARPOL (Annex II) – List of Noxious Liquid Substances Carried in Bulk	Sulphuric acid	Y	3

### **SECTION 15 REGULATORY INFORMATION**

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

SULPHURIC ACID (7664-93-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft

#### WATER (7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)



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National Inventory	Status	
Australia - AICS	Υ	
Canada - DSL	Υ	
Canada - NDSL	N (sulphuric acid, water)	
China - IECSC	Υ	
Europe - EINEC / ELINCS / NLP	Υ	
Japan - ENCS	N (water)	
Korea - KECI	Υ	
New Zealand - NZIoC	Υ	
Philippines - PICCS	Υ	
USA - TSCA	Υ	
	Y = All ingredients are on the inventory	
Legend:	N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see	
	specific ingredients in brackets)	

## **SECTION 16 OTHER INFORMATION**

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

#### **Definitions and abbreviations**

Name	CAS No		
PC-TWA	Permissible Concentration-Time Weighted Average	PC-STEL	Permissible Concentration-Short Term Exposure Limit
IARC	International Agency for Research on Cancer	ACGIH	American Conference of Governmental Industrial Hygienists
STEL	Short Term Exposure Limit	TEEL	Temporary Emergency Exposure Limit
IDLH	Immediately Dangerous to Life or Health Concentrations	OSF	Odour Safety Factor
NOAEL	No Observed Adverse Effect Level	LOAEL	Lowest Observed Adverse Effect Level
TLV	Threshold Limit Value	LOD	Limit Of Detection
ΟΤV	Odour Threshold Value	BCF	BioConcentration Factors
BEI	Biological Exposure Index		

# **END OF SDS**