

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: ALUMIBRITE 6

Recommended use: Aluminium Etchant

Supplier: Australian Chemicals & Coatings Pty Ltd

ABN: 92 884 104 142 Street Address: 69 Quantum Close

Dandenong South Vic 3175

Telephone: +61 3 9799 9833 **Facsimile:** +61 3 9799 9033

Email: sales@auschem.com.au

Emergency Telephone number: 1800 033 111 ALL HOURS

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.





Signal Word

Danger

Hazard Classifications

Acute Toxicity - Oral - Category 3
Acute Toxicity - Dermal - Category 2
Acute Toxicity - Inhalation - Category 3
Skin Corrosion/Irritation - Category 1A
Serious Eye Damage/Irritation - Category 1

Hazard Statements

H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

Prevention Precautionary Statements

P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe dust, fume, gas, mist, vapours or spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash hands, face and all exposed skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective clothing, gloves, eye/face protection and suitable respirator.

Response Precautionary Statements

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P101	If medical advice is needed, have product container or label at hand.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.

Reference No:



P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.

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 CENTRE or doctor/physician. P361 Remove/Take off immediately all contaminated clothing.

P363 Wash contaminated clothing before reuse.

Storage Precautionary Statements

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

P405 Store locked up.

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and

international regulations.

Poison Schedule: S7. Dangerous Poison

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 8

Subrisk 1: 6.1

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Hydrofluoric acid Sulfuric acid Water Ingredients determined to be Non-Hazardous	7664-39-3 7664-93-9 7732-18-5	1-10 % 10-30 % 30 - 60 % Balance

100%

Reference No:

4. FIRST AID MEASURES

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If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

Skin Contact: This material, or a component of the material, can be absorbed through the skin with resultant toxic effects. If skin contact occurs, immediately remove contaminated clothing. Flush skin under running water for 15 minutes. Then apply calcium gluconate gel. Contact the Poisons Information Centre. Seek urgent medical assistance.NOTE: Ensure that supplies of CALCIUM GLUCONATE GEL are within expiry date.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open.



Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Ingestion: Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Immediately call Poisons Centre or Doctor. Transport to a doctor or hospital quickly.

PPE for First Aiders: Wear rubber boots, overalls, gloves, apron, face shield, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from polyvinyl alcohol (PVA), polyvinyl chloride (PVC) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Can cause corneal burns. Treat symptomatically. Can cause corneal burns. The damage caused by exposure to the hydrofluoric acid in this product is far more extensive than that caused by other acids. First aid and medical treatment appropriate to other acids is not beneficial with hydrofluoric acid burns. Hydrofluoric acid penetrates rapidly and deeply below fat layers, binding and depleting tissue calcium. Failure to commence the correct medical treatment promptly may be fatal. Further information about the treatment of hydrofluoric acid burns can be obtained from the National Poisons Information Centre on 13 11 26. First aiders must avoid direct skin contact with the victim as this product has potential to contaminate them.

5. FIRE FIGHTING MEASURES

Hazchem Code: 2X

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Non-combustible material.

Fire fighting further advice: Not applicable.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No: 37

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep container standing upright. Keep containers closed when not in use - check regularly for

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leaks.

This material is classified as a Class 8 Corrosive, Division 6.1 Toxic Substance as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison Schedule 7 (Dangerous Poison) and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Hydrogen fluoride (as F)	3 Peak limitation	2.6 Peak limitation	-	-	-
Sulphuric acid	-	1	-	3	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

Personal Protection Equipment: RUBBER BOOTS, OVERALLS, GLOVES, APRON, FACE SHIELD, RESPIRATOR.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear rubber boots, overalls, gloves, apron, face shield, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from polyvinyl alcohol (PVA), polyvinyl chloride (PVC) should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close

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to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid Colour: Colourless Odour: Perceptible

Solubility: Soluble in water

Density: N Av Relative Vapour Density (air=1): >1 Vapour Pressure (20 °C): N Av Flammability Limits (%): N App **Autoignition Temperature (°C):** N App Melting Point/Range (°C): N Av Boiling Point/Range (°C): >100 pH: <1 Viscosity: N Av Total VOC (g/Litre): N Av

> (Typical values only - consult specification sheet) N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Bases and oxidising agents

Hazardous decomposition products: Oxides of carbon and sulphur. Hydrogen fluoride.

Hazardous reactions: Reacts with bases.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Toxic if inhaled. Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: Fatal in contact with skin. Can be absorbed through the skin with resultant toxic effects. Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.

Ingestion: Toxic if swallowed. Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury.

Acute toxicity

Inhalation: This material has been classified as a Category 3 Hazard. Acute toxicity estimate (based on ingredients): 2.0 < LC50 ≤ 10.0 mg/L for vapours or 0.5 < LC50 ≤ 1.0 mg/L for dust and mist

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Skin contact: This material has been classified as a Category 2 Hazard. Acute toxicity estimate (based on ingredients): 50 - 200 mg/Kg bw

Ingestion: This material has been classified as a Category 3 Hazard. Acute toxicity estimate (based on ingredients): 50 - 300 mg/Kg bw

Corrosion/Irritancy: Eye: this material has been classified as a Category 1 Hazard (irreversible effects to eyes). Skin: this material has been classified as a Category 1A Hazard (irreversible effects to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

Long-term aquatic hazard: This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log K_{ow} < 4.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

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ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".





UN No: 2922

Dangerous Goods Class: 8

Subrisk 1: 6.1

Packing Group: II

Hazchem Code: 2X

Emergency Response Guide No: 37

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S.

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.





UN No: 2922
Dangerous Goods Class: 8
Subrisk 1: 6.1
Packing Group: ||

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S.

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.





UN No: 2922
Dangerous Goods Class: 8
Subrisk 1: 6.1
Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S.

15. REGULATORY INFORMATION

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This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- · Wastes resulting from surface treatment of metals and plastics
- · Acidic solutions or acids in solid form

International Convention for the Prevention of Pollution from Ships (MARPOL)

- · Annex II Noxious Liquid Substances carried in Bulk
- Annex III Harmful Substances carried in Packaged Form

This material/constituent(s) is covered by the following requirements:

- The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth).
- All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Reason for issue: Revised

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.

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