

FSA
UPDATED: 27 April 2023

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name:	FSA
Other Names:	Fluosilicic Acid, Hexafluorosilicic Acid, Hydrofluosilcic Acid
Chemical Formula:	
Product Code:	
Recommended Use:	By-product of fertiliser manufacture, reused in process.
Company Identification:	Ravensdown Fertiliser Co-operative Limited
Address:	292 Main South Road, Hornby, Christchurch 8042 PO Box 1049, Christchurch 8011
Customer Centre:	0800 100 123
National Poisons Information Centre:	0800 POISON (0800 764 766)
Emergency Phone Number:	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
Transport Emergency Phone Number:	111 - tell operator what service is needed: Fire, Ambulance or Police

Section 2: HAZARD IDENTIFICATION

Hazard Classifications:	8.2C, 8.3A
Priority Identifiers:	CORROSIVE
	KEEP OUT OF THE REACH OF CHILDREN
Secondary Identifiers:	8.2C = Corrosive to dermal tissue
	8.3A = Corrosive to ocular tissue



Section 3: COMPOSITION INFORMATION

INGREDIENT	CAS No.	CONTENT	HAZARD
Fluorosilicic Acid	16961-83-4	>25%	R34
Water	7732-18-5	To 100%	Non hazardous

Section 4: FIRST AID MEASURES

First Aid Measures:	Consult the National Poisons Centre on 0800 POISON (0800 764 766) or a doctor
First Alu ivieasures.	
	immediately in every case of suspected poisoning.
Inhalation:	Remove patient from area of exposure. Remove contaminated clothing and loosen
	remaining clothing. Allow patient to assume most comfortable position and keep warm.
	Keep at rest until fully recovered. If patient finds breathing difficult and develops a
	bluish discolouration of the skin (which suggests a lack of oxygen in the blood –
	cyanosis), ensure airways are clear of any obstruction and have a qualified person give
	oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek
	medical advice, if effects persist.
Ingestion:	Never give anything by mouth to an unconscious person. If swallowed rinse mouth but
	DO NOT induce vomiting. Give glass of water. Seek medical attention immediately.
Skin:	If Diphoterine Micro DAP is available: Remove contaminated clothing and wash
	continuously with Micro DAP solution.
	Otherwise: Remove contaminated clothing and flush skin underwater for 15 minutes.
	Then apply calcium gluconate gel. Contact the Poisons Information Centre. For skin
	burns, cover with a clean, dry dressing until medical help is available.
Eye:	If Diphoterine SIEW or Diphoterine solution is available: Wash eye with contents of
	SIEW where available and continue washing with portable Diphoterine solution.
	Otherwise: Flush with plenty of water for several minutes holding eyelids open if
	necessary. Remove contact lenses if present and easy to do. Continue rinsing for at least
	15 minutes, or until advised to stop by Poisons information Centre or Doctor. If eye
	irritation persists seek medical assistance.
Advice to Doctor:	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Flash Point:	N/A (Non-flammable)
Hazardous Combustion	Decomposes on heating emitting toxic fumes, including those of hydrogen fluoride.
Products:	
Extinguishing Media:	Not combustible, however, if material is involved in fire use: Water fog (or if unavailable
	fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).
Protective Equipment:	Self contained breathing apparatus, suitable protective clothing including goggles and
	protective gloves.
HAZCHEM Code:	None allocated

Section 6: ACCIDENTAL RELEASE MEASURES

Spills and Disposal:	Wear appropriate protective clothing. Exclude non-essential people from the area.
	Contain spill and use absorbent (enviropeat or other inert material). Neutralise with
	lime or soda ash. Collect and place in sealable containers. Reuse or recycle where
	possible.
Protective Clothing:	For appropriate personal protective equipment see section 8.
Environmental	Avoid unintended release of excessive amounts into waterways or sewers. If spill does
	enter waterway contact local authority.

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Section 7: HANDLING AND STORAGE

	Avoid contact with skin and eyes. Avoid breathing in vapour, mists and aerosols. Always
	add the acid to water, never the reverse.
Handling:	Approved Handler: Not required
	Tracking: Not required
	Record Keeping: Not required
Storage:	Store in a cool, dry area away from foodstuffs. Store away from incompatible materials
	described in Section 10.
Other Information:	Do not eat, drink or smoke whilst using product. Wash hands thoroughly after handling.
	Avoid unintended release into the environment.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits:	No value assigned for this specific material by the Department of Labour. However, Workplace Exposure Standards(s) for constituents(s):
	Fluorides (as F): 8h TWA = 2.5 mg/m3
	As published by the Department of Labour.
	TWA – The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.
	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
Protective Equipment:	Overalls, safety glasses, hard hat, gumboots, face mask and long rubber gloves. Eye wash facilities should be available. Wash contaminated clothing and other protective equipment before storage or re-use.
Engineering Controls:	Ensure ventilation is adequate and that air concentrations of components are controlled
	below quoted Exposure Standards. If inhalation risk exists: Use with local exhaust
	ventilation or while wearing suitable mist respirator. Keep containers closed when not in
	use.
Hygiene Precautions:	Do not eat, drink or smoke while using this product. Remove protective clothing and
	wash hands and face before meals and after work. Wash protective clothing daily after
	work.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid product with white to grey suspension
Format:	Liquid
Odour:	Characteristic Sour
Specific Gravity:	1.2 @ 15°C
pH:	Not available
Solubility in Water:	Miscible in water
Boiling Point:	
Melting Point:	N/A
Other Information:	None

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Section 10: STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Hazardous Polymerisation:	Will not occur.
Hazardous Decomposition	Decomposes on heating emitting toxic fumes, including those of hydrogen fluoride.
Products:	
Conditions to Avoid:	Strong heat, moisture.
Materials to Avoid:	Oxidising agents, especially hypochlorites, also perchlorates, acids, bases.

Section 11: TOXICOLOGICAL INFORMATION

Hazard Classifications:	8.2C, 8.3A	
Ingestion:	Swallowing. Results in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract	
Inhalation:	Irritant. Breathing in mists or aerosols may produce respiratory irritation.	
Skin:	Severe Irritant. Contact with skin will results in severe irritation. Corrosive to skin – may cause skin burns.	
Eye:	Severe Irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can results in permanent injury.	
Chronic Effects:	Repeated or prolonged exposure may results in fluorosis.	
Other Information:	Low toxicity, no adverse health affects expected if the product is handled in accordance with the Safety Data Sheet.	

Section 12: ECOLOGICAL INFORMATION

Hazard Classifications:	None.
Ecotoxicity:	Avoid contaminating streams and waterways.

Section 13: DISPOSAL INFORMATION

Product Disposal:	Reuse or recycle where possible. Refer to Waste Management Authority if disposal is
	required.
Container Disposal:	Rinse containers thoroughly prior to reuse. Otherwise render unusable and dispose of as
	waste

Section 14: TRANSPORT INFORMATION

UN Number:	1778
Proper Shipping Name:	Fluorosilicic Acid
DG Class:	8 - Corrosive
UN Packing Group:	II
Other Informations	Refer to Land Transport Rule 45001/01 for latest segregation information. Transport by
	sea may require additional segregation. Refer to NZS 5433 for further information.

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Section 15: REGULATORY INFORMATION

EPA:	Approved pursuant to the HSNO Act 1996, Approval number HSR004495.
See <u>www.epa.govt.nz</u> for approval controls.	

Section 16: OTHER INFORMATION

This Safety Data Sheet was updated on the date shown and supersedes all previous versions.

The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material. The information is provided in good faith based on current knowledge and experience. No warranty with regard to the product properties is expressed or implied.

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