



<b>Section</b>	<b>3:</b>	<b>HAZARDS IDENTIFICATION (Cont.)</b>
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### 3.1 POTENTIAL HEALTH EFFECTS

**EYE:** Contact with the eyes by product causes irritation and redness.

**SKIN CONTACT:** Prolonged or repeated contact with product cause skin irritation, redness. Harmful if absorbed through the skin; will cause redness, and swelling.

**SKIN ABSORPTION:** Absorption is may occur.

**INGESTION:** Ingestion of product causes irritation of the gastrointestinal tract to possibly include nausea, vomiting and diarrhea.

**INHALATION:** Inhalation of product granules may cause irritation of the nose, throat and upper respiratory tract.

**CHRONIC EFFECTS/CARCINOGENICITY:** Not listed as a carcinogen by NTP, IARC or OSHA, however, US EPA's Integrated Risk Information System (IRIS) rates Fosetyl-Al as a possible human carcinogen.

<b>Section</b>	<b>4:</b>	<b>FIRST AID MEASURES</b>
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**4.1 EYES:** Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs.

**4.2 SKIN:** Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Obtain medical attention if irritation occurs.

**4.3 INGESTION:** If victim is conscious, give 2 to 4 glasses of water but do not induce vomiting unless directed by a physician or the Poison Control Center. Obtain medical attention.

**4.4 INHALATION:** Remove victim from contaminated atmosphere. If breathing is labored, administer oxygen. If breathing has ceased, clear airway and start mouth to mouth resuscitation. If heart has stopped beating, external heart massage should be applied. Obtain medical attention.

<b>Section</b>	<b>5:</b>	<b>FIRE FIGHTING MEASURES</b>
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### 5.1 FLAMMABLE PROPERTIES

**FLASH POINT:** Not applicable

**METHOD USED:** NA

### 5.2 FLAMMABLE LIMITS

**LFL:** NA

**UFL:** NA

**5.3 EXTINGUISHING MEDIA:** Foam, dry powder, carbon dioxide (CO<sub>2</sub>)

**5.4 FIRE & EXPLOSIVE HAZARDS:** This product. When mixed with air in critical proportions and in the presence of an ignition source, may present a dust explosion hazard.

Contain the spread of the fire fighting media. Dike are to prevent runoff and contamination of water sources.

<b>Section</b>	<b>5:</b>	<b>FIRE FIGHTING MEASURES (Cont.)</b>
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**5.5 FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<b>Section</b>	<b>6:</b>	<b>ACCIDENTAL RELEASE MEASURES</b>
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**6.1 Small releases:** clean up promptly by sweeping or vacuum. Pick up and transfer to properly labeled containers.

**6.2 Large releases:** Confine area to qualified personnel. Block off release if safe to do so. Dike spill area to prevent runoff into sewers, drains or surface waterways (potential aquatic toxicity). Recover as much of the product as possible. Treat remaining material as a small release (above).

<b>Section</b>	<b>7:</b>	<b>HANDLING and STORAGE</b>
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**7.1 Handling:** Avoid contact with eyes. Use only in a well ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapors. Avoid prolonged or repeated contact with the skin.

**7.2 Storage:** Do not store combustibles in the area of storage containers. Keep away from any sources of heat or flame. Store tote and smaller containers out of direct sunlight at moderate temperatures. (See Section 10.4 for materials of construction)

<b>Section</b>	<b>8:</b>	<b>EXPOSURE CONTROLS, PERSONAL PROTECTION</b>
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**8.1 RESPIRATORY PROTECTION:** If conditions exist where particles may become airborne, a NIOSH/MSHA approved respirator should be worn.

**8.2 SKIN PROTECTION:** Applicators and handlers must wear long-sleeved shirt and long pants, waterproof gloves shoes and socks. Wash contaminated clothing prior to reuse.

**8.3 EYE PROTECTION:** Safety glasses with side-shields or Chemical goggles or a full face shield.

**8.4 EXPOSURE GUIDELINES:**

	OSHA		ACGIH	
	TWA	STEL	TLV	STEL
Fosetyl Aluminum	NA	NA	2 mg/m <sup>3</sup> (as Al)	NA

**8.5 ENGINEERING CONTROLS:** Use adequate exhaust ventilation to prevent inhalation of product granules.

**Section 9: PHYSICAL and CHEMICAL PROPERTIES**

<b>9.1 APPEARANCE:</b>	Green, dry free-flowing granules
<b>9.2 ODOR:</b>	Product specific
<b>9.3 BOILING POINT:</b>	NA
<b>9.4 VAPOR PRESSURE:</b>	NA
<b>9.5 VAPOR DENSITY:</b>	NA
<b>9.6 SOLUBILITY IN WATER:</b>	Dispersible
<b>9.7 SPECIFIC GRAVITY:</b>	
<b>9.8 FREEZING POINT:</b>	NA
<b>9.9 pH:</b>	3.0 – 4.0 (1.0%) at 23 °C
<b>9.10 VOLATILE:</b>	NA

**Section 10: STABILITY and REACTIVITY**

**10.1 STABILITY:** This is a stable material under normal conditions.

**10.2 HAZARDOUS POLYMERIZATION:** Will not occur

**10.3 HAZARDOUS DECOMPOSITION PRODUCTS:** From thermal decomposition – oxides of phosphorus, carbon dioxide, CO<sub>2</sub>, carbon monoxide, and phosphine gas. No hazardous reactions will occur when stored and handled according to prescribed instructions.

**10.4 INCOMPATIBILITY:** Avoid extreme humidity, strong acids, strong bases, strong oxidizing or reducing agents.

**Section 11: TOXICOLOGICAL INFORMATION**

**11.1 ORAL:** Oral rat: LD<sub>50</sub>: 2,860 mg/kg

**11.2 DERMAL:** Dermal rabbit: LD<sub>50</sub>: > 2,000 mg/kg

**11.3 INHALATION:** Inhalation rat: LC<sub>50</sub>: > 5 mg/L (4 Hrs)

**11.4 CHRONIC/CARCINOGENICITY:** EPA (IRIS) – possible human carcinogen

**11.5 TERATOLOGY:** Data not available

**11.6 REPRODUCTION:** Data not available

**11.7 MUTAGENICITY:** Data not available

**11.8 IRRITATION (Rabbit):** Skin – slight irritation  
Eye – mild eye irritation  
Sensitization – (guinea) non-sensitizing

<b>Section</b>	<b>12:</b>	<b>ECOLOGICAL INFORMATION</b>
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**Environmental Precautions:** This product is toxic to aquatic and estuarine invertebrates. Drift and runoff from treated areas may be hazardous to fish/aquatic organisms in adjacent sites. Do not apply directly to water, to areas where surface water is present or to inter-tidal areas below the mean high water mark outside of a treated rice field. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.

<b>Section</b>	<b>13:</b>	<b>DISPOSAL CONSIDERATIONS</b>
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Follow container label instructions fore disposal of wastes generated during use in compliance with the product label. Dispose of product containers, waste containers and residues according to local, state and federal environmental and health regulations.

Proper disposal of containers starts with emptying any remaining residue in the container. Then triple rinse the container. Rinsed packaging may be acceptable for landfill, other wise incineration will be required in accordance with local, state and federal law. Do not re-use empty containers.

<b>Section</b>	<b>14:</b>	<b>TRANSPORT INFORMATION</b>
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<b>14.1 DOT Shipping Name:</b>	Fosetyl aluminum (not regulated)
<b>14.2 DOT Hazard Class:</b>	NA
<b>14.3 UN/NA Number:</b>	NA
<b>14.4 Packing Group:</b>	NA
<b>14.5 DOT Placard:</b>	NA
<b>14.6 DOT Label(s):</b>	NA
<b>14.7 IMO Shipping Name:</b>	Fosetyl aluminum
<b>14.8 RQ (Reportable Quantity):</b>	NA
<b>14.9 RR STCC Number:</b>	NA

<b>Section</b>	<b>15:</b>	<b>REGULATORY INFORMATION</b>
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**15.1 OSHA:** This product is listed as a hazardous material under criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**15.2 SARA TITLE III:**

a. **EHS (Extremely Hazardous Substance) List:** No

<b>Section</b>	<b>15: REGULATORY INFORMATION (Cont.)</b>
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b.	Section 311/312, (Tier I,II) Categories:	Immediate (acute)	Yes
		Fire	No
		Sudden release	No
		Reactivity	No
		Delayed (chronic)	Yes
c.	Section 313 (Toxic Release Reporting-Form R):		No
d.	<b>TPQ</b> (Threshold Planning Quantity):		No
<b>15.3 CERCLA/SUPERFUND:</b>	RQ (Reportable Quantity)		No
<b>15.4 TSCA</b> (Toxic Substance Control Act) Inventory List:			Yes
<b>15.5 RCRA</b> (Resource Conservation and Recovery Act) Status:			NA
<b>15.6 WHMIS</b> (Canada) Hazard Classification:			NA
<b>15.6A DSL/NDSL</b>			Unk
<b>15.7 DOT</b> Hazardous Material: (See Section 14)			No
<b>15.8 CAA</b> Hazardous Air Pollutant (HAP)			No
<b>15.9 FIFRA</b>		EPA Reg. No. 61842-10	Yes,
<b>15.10 Prop 65</b>			No

<b>Section</b>	<b>16: OTHER INFORMATION</b>
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**REVISIONS:** The entire MSDS was reformatted to comply to ANSI Standard Z400.1-1993, by Technical Services-Tessengerlo Kerley, Inc.

<p>THE INFORMATION PUBLISHED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN COMPILED FROM OUR EXPERIENCE AND OSHA, ANSI, NFPA, DOT, ERG, HSDB AND CHRIS. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THE ADOPTION OF NECESSARY SAFETY PRECAUTIONS. WE RESERVE THE RIGHT TO REVISE MATERIAL SAFETY DATA SHEETS PERIODICALLY AS NEW INFORMATION BECOMES AVAILABLE.</p>
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