



Date of revision: 11/24/2008

## 1. Product and Company Identification

**Product Name**

**Cublen AP 5**

**Product CAS Number (if applicable)**

**Mixture**

**Product Type, Usage, or Industry**

**Aqueous solution of an aminophosphonic acid**

**Company Information**

Zschimmer and Schwarz, Inc.  
70 GA Hwy. 22 W  
Milledgeville, GA 31061

**Emergency Contact**

**Company: (478) 454-1942**  
**CHEMTREC: (800) 424-9300**

## 2. Hazardous Composition and Information

This section contains hazardous components which comprise 1.0% or more of the formula; carcinogens are listed at 0.1% or greater.

<u>CAS Number</u>	<u>Material or component</u>	<u>Avg % weight</u>
10294-56-1	Phosphorous acid	2.5 – 10%
6419-19-8	Nitriлотrimethylenetris(phosphonic acid)	25 – 50%

This is not intended to be a complete compositional disclosure. Information provided pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200).

## 3. Hazards identification

**HMIS Rating:**

**Health: 2**

**Fire: 0**

**Reactivity: 1**

**PPE: X**

**Primary routes of exposure:**

**Eyes: CORROSIVE!** May cause redness, pain, blurred vision, eye burns, and permanent eye damage.

**Skin: CORROSIVE!** May cause redness, pain, and severe skin burns.

**Inhalation:** Not an expected hazard unless misted or heated to high temperatures. Mist or vapor inhalation may cause irritation to the nose, throat and upper respiratory tract.



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**Ingestion:** May cause sore throat, abdominal pain, nausea, and severe burns of the mouth, throat, and stomach.

#### 4. First Aid Measures

**Eyes:**

Immediately flush with gentle but large stream of water for 15 min, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**Skin:**

Wash affected area with soap and water. If irritation develops, consult a physician. Contaminated clothing should be removed immediately and washed before reuse. Contaminated shoes should be discarded.

**Inhalation:**

Move the person to fresh air and get medical attention.

**Ingestion:**

Do not induce vomiting. Rinse mouth with plenty of water and get immediate medical attention.

#### 5. Firefighting Measures

**Flash point:** N/A

**Flammability limits:** *Lel:* N/D. *Uel:* N/D

**Suitable extinguishing media:**

alcohol-resistant foam; dry powder; CO<sub>2</sub>

**Special protective equipment for firefighters:** Self-contained breathing apparatus and protective clothing when fighting any chemical fire

**Unusual fire & explosion Hazards:**

None known.

#### 6. Accidental Release Measures

**Personal precautions:**

Avoid contact with eyes and skin. Avoid breathing in mists of product. Keep all unnecessary personnel away.

**Environmental precautions**

Dilute with water and use neutralizing agent. Limit leakage with earth or sand. Do not discharge into the drains/surface water/ground water. Dispose of absorbed material in accordance with local, state and federal regulations.

**Methods for cleaning up/taking up**

Use neutralizing agent. Take up with absorbent material (e.g. vermiculite, general purpose binder.). Dispose of absorbed material in accordance with local, state, and federal regulations.



## 7. Handling and Storage

### Advice on safe handling

Avoid getting on skin or in eyes when handling product. Do not use near alkaline materials. Use only in well-ventilated area.

### Advice on protection against fire and explosion

No special measures necessary.

### Requirements for storage rooms and vessels

Do not store together with alkaline materials. Do not use iron, steel, copper / copper-alloys or light alloy receptacles. For short time storage stainless steel containers are acceptable. Keep tightly sealed.

## 8. Exposure Controls and Personal Protective Equipment

### Component with OSHA exposure limits to be monitored

CAS No.	Description of substance	Type	Value
	None		

### General protective measures / hygiene measures:

Observe the usual precautions when handling chemicals.

<b>Hand protection:</b>	Use impervious gloves
<b>Eye protection:</b>	Safety glasses with side shields
<b>Respiratory protection:</b>	Recommended.
<b>Skin protection:</b>	Protective clothing
<b>Ventilation:</b>	Recommended
<b>Local Exhaust:</b>	Recommended.
<b>Other Protective Equipment:</b>	Eye-wash station

## 9. Physical and Chemical Characteristics

<b>Form and Appearance:</b>	Clear, light yellow liquid
<b>Odor:</b>	Characteristic
<b>Boiling point:</b>	~ 212°F (100°C)
<b>Freezing point:</b>	~ -67°F (-55°C)
<b>pH:</b>	~ 1.5 @ 1%
<b>Specific gravity/Bulk Density:</b>	~1.3
<b>Flash point:</b>	N/A
<b>Viscosity:</b>	N/D
<b>Solubility in water:</b>	Soluble
<b>Vapor pressure:</b>	N/D



## 10. Stability and Reactivity

<b>Chemical stability:</b>	Product is stable under ordinary conditions of use and storage.
<b>Conditions to avoid:</b>	Exposure to alkalis and high temperatures.
<b>Incompatibility:</b>	To strong oxidizers and metals.
<b>Hazardous decomposition products:</b>	High temperatures may produce PO <sub>x</sub> , NO <sub>x</sub> , and CO <sub>x</sub> , and phosphine.
<b>Hazardous polymerization:</b>	Will not occur.

## 11. Toxicological Information

### Acute Toxicity:

<b>Eyes:</b>	Irritating to eyes.
<b>Ingestion:</b>	LD50 (oral): rat 2,910 mg/kg
<b>Skin:</b>	LD50 (dermal): rabbit > 6,310mg/kg
<b>Inhalation:</b>	Irritating to respiratory tract.

**Chronic Health Effects:** None.

## 12. Ecological Information

<b>Ecotoxicity:</b>	LC50(Salmo gairdneri) 330 mg/l 96h 150 mg/l 14d
	EC50(Daphnia magna) 297 mg/l 48h

**Environmental fate:** No information available.

## 13. Disposal Considerations

Dispose of absorbed material in accordance with local, state, and federal regulations.



### 14. Transport Regulations

**DOT Regulations:**

<b>Proper Shipping Name:</b>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (aminophosphonic acid)
<b>Hazard Class:</b>	8
<b>UN Number:</b>	UN3265
<b>Packing Group:</b>	III
<b>Label Required:</b>	Corrosive

### 15. Regulatory Information

Contents of this MSDS comply with the OSHA standard 29 CFR 1910.1200.  
TSCA Status: All the components in this material are listed under TSCA inventory.

EPA SARA Title 302: None.  
EPA Section 304 CERCLA Hazardous substance: None.

CAS #	Description	% Weight	CERCLA RQ
	None		

**EPA Section 311/312 Hazard Categorization:**

<b>Acute</b>	<b>x</b>	<b>Chronic</b>	<b>Fire</b>	<b>Pressure</b>	<b>Reactive</b>	<b>None</b>
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EPA Section 313 Toxic chemicals: None  
State hazardous information: None

### 16. Additional Information

This information is based on our present state of knowledge. It should not be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Existing acts and regulations must be observed by the recipient of our products under their own responsibility.