

# Safety Data Sheet

Adena 5014

## SECTION I - IDENTIFICATION

	General Products & Supply, Inc. Murrysville Industrial Park Export, PA 15632 (888) 247-2312 CHEMTEL :..... (800) 225-3924
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<b>Product Number</b>	AD5014
<b>Product Name</b>	Adena 5014
<b>Chemical Family</b>	Compound, industrial process water treating, liquid
<b>CAS Number</b>	Multiple
<b>Date Prepared</b>	12/3/2015
<b>Revision Number</b>	1/29/2015
<b>Recommended Use</b>	Corrosion & Scale Inhibitor

## SECTION II - HAZARDOUS IDENTIFICATION

### GHS CLASSIFICATION:

#### Classification

Corrosive to Metals	Category 1
Acute Toxicity, Oral	Category 4
Acute Toxicity, Dermal	Category 4
Skin Corrosion/Irritation	Category 1A, B, C
Sensitization, Skin	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Acute Toxicity, Inhalation	Category 4
Hazardous to the aquatic environment, acute hazard	Category 3

### DANGER!

#### GHS LABEL:



#### Hazard Statements

H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H332	Harmful if inhaled

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H402 Harmful to aquatic life

### **Precautionary Statements**

P234	Keep only in original packaging
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated are.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+352	IF ON SKIN: Wash with plenty of water/...
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water or shower.
p304+340	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or a doctor/physician if you feel unwell.
P321	Specific treatment (see ... on this label).
P330	Rinse mouth.
P333+313	If skin irritation or a rash occurs: Get medical advice/attention.
P362+364	Take off immediatley all contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
p390	Absorb spillage to prevent material damage.
P405	Store locked up.
P406	Store in a corrosive resistant/... container with a resistant inner liner.
P501	Dispose of contents/container to...

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## SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

The precise composition of this product is proprietary information. In the event of a medical emergency, a complete disclosure will be provided to medical personnel.

Component Name	CAS #	Component%	OSHA PEL	ACGIH TLV
Sodium Hydroxide	1310-73-2	8-12	2 mg/m <sup>3</sup> , Ceiling	2 mg/m <sup>3</sup> , Ceiling
Sodium Tolytriazole	64665-57-2	1-2	2 mg/m <sup>3</sup> (NaOH)	2 mg/m <sup>3</sup> (NaOH)
2-phosphonobutane-1,2,4-tricarboxylic acid	0037971-36-1	3-5	Not Established	Not Established
1-Hydroxyethylidene-1,1-diphosphonic acid	0002809-21-4	3-5	Not Established	Not Established
SODIUM MOLYBDATE DIHYDRATE	10102-40-6	1-2	5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>
Acrylic Polymer, Sodium Salt	None Listed	3-5	Not Established	Not Established
Water	7732-18-5	Balance	Not Established	Not Established

## SECTION IV - FIRST AID MEASURES

**Contact with eyes:** In case of contact with substance, immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention, preferably with an ophthalmologist. If the physician is not immediately available, eye irrigation should be continued for an additional 15 minutes. If it is necessary to transport the patient to a physician and the eye needs to be bandaged, use a dry sterile cloth pad and cover both

**Skin contact:** Take off immediately all contaminated clothing. Wash off IMMEDIATELY with plenty of water for at least 15-20 minutes. Get medical attention immediately! Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

**Ingestion:** Call a physician or poison control center immediately. Do not induce vomiting. Immediately rinse mouth and drink plenty of water. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Never give anything by mouth to an unconscious person. Do not use mouth-to-mouth method if victim ingested the substance.

## SECTION V - FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** As appropriate for the surrounding fire.

**Special Fire Fighting Procedures** Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Keep unauthorized personnel away. Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Persons who may have been exposed to contaminated smoke should be immediately examined by a

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physician and checked for symptoms of poisoning. The symptoms should not

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be mistaken for heat exhaustion or smoke inhalation.

**Unusual Fire Fighting Hazards:** The product itself does not burn. May decompose upon heating to produce corrosive and/or toxic fumes. Contact with metal may release flammable hydrogen gas.

### SECTION VI - ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. (Also see Section 8).  
Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep out of low areas. Ensure adequate ventilation. Ventilate closed spaces before entering them.
- Environmental Precautions:** Do not flush to sewer or waterways. Prevent release to the environment if possible. Refer to Section 15 for spill/release reporting information.
- Methods for Cleaning Up:** Small spills should be absorbed with a suitable dry inert material (such as sand or earth) or a neutralizing material (such as limestone, lime, sodium bicarbonate or soda ash). Take care to avoid any foaming or splattering that may occur from the neutralization reaction of the acid with these materials. Remove the absorbed material and place in an appropriate chemical waste container for proper disposal. Large spills should be diked to prevent spreading. Keep water away from spill. Pump spilled material to salvage according to a predetermined plan. Remove residual material as described above. Washing down of spills with water is not recommended because this tends to spread the contamination and increase the likelihood of percolating the acid down through the soil and/or of uncontrolled flow of acid into sewers, streams or other waters. Sulfuric acid leaks, spills or drainings must not contact any acid soluble sulfide wastes (such as sewers) because of the danger of evolving hydrogen sulfide gas.

### SECTION VII - HANDLING AND STORAGE

- Handling and Storage:**
- Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Keep container closed. Use only with adequate ventilation. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use.
  - Store the container in a cool, dry, well ventilated area. Store the container away from incompatible materials. Store the container at ambient temperature. Keep containers tightly closed and upright when not in use. Protect against physical damage. Empty containers may contain toxic, residue or vapors. Do not cut, grind, drill, or weld on or near containers unless precautions are taken against these hazards.

### SECTION VIII - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

**EXPOSURE LIMITS:**

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Component Name	CAS #	OSHA PEL	ACGIH TLV
Water	7732-18-5	Not Established	Not Established
Sodium Tolytriazole	64665-57-2	2 mg/m <sup>3</sup> (NaOH)	2 mg/m <sup>3</sup> (NaOH)
2-phosphonobutane-1,2,4-tricarboxylic acid	0037971-36-1	Not Established	Not Established
1-Hydroxyethylidene-1,1-diphosphonic acid	0002809-21-4	Not Established	Not Established
SODIUM MOLYBDATE DIHYDRATE	10102-40-6	5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>
Acrylic Polymer, Sodium Salt	None Listed	Not Established	Not Established
Sodium Hydroxide	1310-73-2	2 mg/m <sup>3</sup> , Ceiling	2 mg/m <sup>3</sup> , Ceiling

**Engineering Controls:** Local exhaust ventilation may be necessary to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Provide mechanical ventilation for confined spaces. Use explosion-proof ventilation equipment.

**Monitoring:** Follow accepted work practices for handling a corrosive material. When using, do not eat, drink or smoke. Do not get this material in your eyes, on your skin, or on your clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

### Personal Protective Equipment (PPE)

**Eye Protection:** Wear chemical safety goggles and face shield. Have eye-wash stations available where eye contact can occur.

**Skin Protection:** Avoid skin contact. Wear gloves impervious to conditions of use. Additional protection may be necessary to prevent skin contact including use of apron, face shield, boots or full body protection. A safety shower should be located in the work area.

**Respiratory Protection:** If exposure limits are exceeded, NIOSH approved respiratory protection should be worn. A NIOSH approved respirator for organic vapors is generally acceptable for concentrations up to 10 times the PEL. For higher concentrations, unknown concentrations and for oxygen deficient atmospheres, use a NIOSH approved air-supplied respirator. Engineering controls are the preferred means for controlling chemical exposures. Respiratory protection may be needed for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA 29 CFR 1910.134.

## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

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Appearance	Clear, yellow liquid
Odor	Musty
pH@25°C	11.5-13.5
Melting/Freezing Point	28-32°F
Flashpoint	Not flammable
Specific Gravity	1.07
Solubility	Complete @ 20°C
Auto-Ignition Temperature	NO DATA
Decomposition Temperature	No information found
VOC Content	~ 65% (WATER)
Odor Threshold	Not determined
Boiling Range	100-110°C @ 760 mm Hg
Evaporation Point	SIMILAR TO WATER
Flammable Limits - Upper	Not applicable
Flammable Limits - Lower	Not applicable
Vapor Pressure	23.76 mm Hg (approximately) (77 °F (25 °C))
Vapor Density (Air=1)	SIMILAR TO WATER
Viscosity	40-80 cP @ 25°C

### SECTION X - STABILITY AND REACTIVITY

**Stability:** Stable, under normal conditions of storage and handling.

**Conditions to Avoid:** Contact with incompatible materials.

**Hazardous Decomposition/Byproducts:** Contact with metals (aluminum, zinc, tin) and sodium tetrahydroborate liberates hydrogen gas.

**Hazardous Polymerization:** Will not occur.

**Polymerization Conditions to Avoid:** None

**Incompatibilities:** Oxidizing agents. Acids. Phosphorus. Aluminum. )inc. Tin. Initiates or catalyzes violent polymerization of acetaldehyde, acrolein or acrylonitrile.

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### SECTION XI - TOXICOLOGICAL INFORMATION

**Likely Route of Exposure:** Inhalation, Skin, Eye, Ingestion.

**Inhalation:** Under normal conditions of use, no health effects are expected.

**Eye Contact:** May cause severe conjunctival irritation and corneal damage.

**Skin Contact:** Causes skin irritation.

**Ingestion:** Causes corrosion, burns to mouth and esophagus, abdominal pain, chest pain, nausea, vomiting, diarrhea, seizures. Aspiration of the swallowed or vomited product can cause severe pulmonary complications.

**Acute Toxicity Value:** Oral LD50 (Rat) = > 2000 mg/kg Dermal LD50 (Rabbit) = > 2000 mg/kg  
Inhalation LC50 (Rat) = 200 ppm/4 hr., 1100 ppm vapor/1 hr.

**Chronic (Long Term) Effects:** See Health Hazards above.  
Repeated or prolonged exposure to corrosive materials or fumes may cause Gastrointestinal disturbances.  
Repeated or prolonged exposure may cause dermatitis.  
Repeated or prolonged exposure to corrosive fumes may cause bronchial irritation with chronic cough.  
Repeated or prolonged exposure to corrosive materials or fumes may cause conjunctivitis

#### Toxicity:

Component Name	LD50	LC50
Water	Not Established	Not Established
Sodium Tolytriazole	Mouse 40 mg/kg	Not Established
2-phosphonobutane-1,2,4-tricarboxylic acid	LD 50, Oral rat, 2,000 mg/Kg, LD 50, Dermal rabbit, > 2,000 mg/kg	Not Established
1-Hydroxyethylidene-1,1-diphosphonic acid	Oral LD50 2,400.00, Rat, Skin LD50 10,000.00 Rabbit	Not Listed
SODIUM MOLYBDATE DIHYDRATE	4 g/kg ( Rat ) 4000 mg/kg ( Rat )	2080 mg/m3 ( Rat ) 4 h
Acrylic Polymer, Sodium Salt	Not Established	Not Established
Sodium Hydroxide	300-500 mg/kg, Oral, LD50 (Rat), >2000 mg/kg, Dermal	Not Listed



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<b>Reproductive Effects</b>	Not Applicable
<b>Teratogenicity</b>	Not Applicable
<b>Mutagenicity</b>	Not Applicable
<b>Embryotoxicity</b>	Not Applicable
<b>Sensitization to Product</b>	Not Applicable
<b>Synergistic Products</b>	Not Applicable
<b>Carcinogenicity</b>	Not Applicable

### SECTION XII - ECOLOGICAL INFORMATION

**Ecotoxicity:** BLUEGILL: 1200 MG/L, LC50, 48 HR FATHEAD MINNOW: 820 MG/L, LC50, 48 HR CERIODAPHNIA MAGNA: > 500 MG/L, LC50, 48 HR ALGAE: 45MG/L, IC50, 72 HR

**Mobility:** Information not available.

**Degradability:** Expected to biodegrade.

**BioAccumulation:** Information not available.

### SECTION XIII - WASTE DISPOSAL CONSIDERATIONS

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### SECTION XIV - TRANSPORT INFORMATION

#### DOT SHIPPING INFORMATION

**Proper Shipping Name:** Corrosive liquid, basic, organic, n.o.s.

**Contains:** Sodium Hydroxide, Sodium Tolytriazole

**Hazard Class and Label:** 8

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**Identification Number:** UN3267

**Packaging Group:** III

**Other Shipping Info:** SPECIAL PRECAUTIONS FOR USER: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not established.

### SECTION XV - REGULATORY INFORMATION

**TSCA STATUS:**..... The components of this product are listed on the TSCA Inventory

**SARA TITLE III SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCE:**

No chemicals in this material are subject to the reporting requirements.

**SARA TITLE III SECTION 311/312 HAZARD CATEGORIZATION:**

Acute	Chronic	Fire	Pressure	Reactive
X				X

**SARA TITLE III SECTION 313 SUPPLIER INFORMATION:**

Component Name	CAS #	% by wt.
Not applicable	Not applicable	1-2

**CERCLA SECTION 102(a) HAZARDOUS SUBSTANCE:**

Component Name	CAS #	% by wt.	RQ (lbs.)
Sodium Hydroxide	1310-73-2	8-12	1,000

**CALIFORNIA PROPOSITION 65:**

No chemicals in this material are subject to the reporting requirements.

### SECTION XVI - OTHER INFORMATION

**HMIS Health:**..... 2

**HMIS Flammability:** ..... 0

**HMIS Reactivity:** ..... 1

**Additional:** Disclaimer: The information contained herein is accurate to the best of our knowledge. No warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

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