

RSA MicroTech, LLC

Material Safety Data Sheet

FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL:
CHEMTREC 1-800-424-9300

Section 1 – Chemical Product and Company Identification

Product Name: **RSA Actaphos 0-60-0**

Common Name: 0-60-0 fertilizer solution, liquid

Chemical Description: 0-60-0 fertilizer Solution, liquid

Distributor Name:

RSA MicroTech, LLC

PO Box 39

Marysville, WA 98270

Revision Date: 10-14-04

Emergency Telephone Number:

CHEMTREC 1-800-424-9300

Telephone Number for Information:

1-206-286-7878

Replaces: 10-2-04

Section 2 – Composition Information on Ingredients

Ingredient	%	TLV or PEL	NFPA HAZARD RATING:			
Available Phosphate (P ₂ O ₅)	60.0	N/A	0	Least		
Derived from phosphorous acid			1	Slight	3	Health
			2	Moderate	0	Flammability
			3	High	2	Instability
			4	Severe		

Section 3 – Hazards Identification: **CORROSIVE**

Emergency Overview: This product is highly corrosive and acidic in nature. This product can irritate, redden and burn skin, eyes, and other contaminated tissue. This product is not flammable; however, if exposed to high temperatures, toxic decomposition products (e.g., phosphine, phosphorus compounds) will be generated. Flammable hydrogen gas may be generated by contact with metals. This solution will generate a small amount of heat when in contact with water. Persons who respond to releases of this product must protect themselves from inhalation of acidic vapors and mists from this product, especially in areas which are downwind of the spill. Extreme caution must be used when responding to spill. Emergency responders must wear the PPE suitable for the situation, which they are responding to.

CAUTION: CORROSIVE: KEEP OUT OF REACH OF CHILDREN.

Route(s) of Entry: Eyes, Inhalation, Skin and Ingestion

Health Hazards (Acute and Chronic):

Inhalation: Inhalation of mists or spray of this product may cause pulmonary irritation, irritation of the mucous membranes, coughing, laryngitis, headache, nausea, vomiting and a sore throat. Prolonged overexposures or exposures to high concentrations of mists or sprays of this solution may damage the tissues of the respiratory system. Severe overexposures can cause pulmonary edema, chemical pneumonitis and other adverse health consequences. Chronic exposure to the vapors of this product can cause dental erosion. Severe overexposures may be fatal.

Eyes: Eye contact can cause irritation, pain, reddening and blindness.

Skin: Skin contact can cause reddening, discomfort, irritation, chemical burns, blistering of the skin and scarring. Repeated skin overexposures can cause dermatitis (dry, red skin). Skin Absorption is not a significant route of exposure for any component of this product.

Ingestion: Ingestion is not anticipated to be a likely route of exposure to this product. If this product is swallowed, it can irritate and burn the mouth, throat esophagus and other tissue of the digestive system. Symptoms of such overexposure can include nausea, vomiting and diarrhea. Ingestion of large volumes of this product may be fatal.

Carcinogenicity NTP: Not Listed IARC: Not Listed OSHA: Not Listed

Section 4 – First Aid Measures

Inhalation: Remove person to fresh air and support breathing as needed. Seek medical attention if irritation persists.

Ingestion: Have a *conscious* person drink 1 to 2 glasses of water or milk to dilute. Have victim rinse mouth with water, if conscious. **SEEK MEDICAL ATTENTION OR CALL A POISON CONTROL CENTER IMMEDIATELY. DO NOT INDUCE VOMITING**, unless directed by medical personnel.

Eyes: Flush with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. Seek medical attention if eye irritation persists.

Skin: Immediately remove contaminated clothing and wash before re-using. Flush skin with water for at least 15 minutes, and then wash with soap and water. Seek medical attention if skin becomes irritated.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 – Fire and Explosion Hazard Data

Flash Point: N/A **Flammable Limits:** N/A **LEL:** N/E **UEL:** N/E

Extinguishing Media: Materials suitable to surrounding fire.

Special Fire Fighting Procedures: Fire responders should wear eye protection, self-contained breathing apparatus and full protective clothing. Smoke and fumes from fire may contain hazardous components. Neutralize area with sodium bicarbonate or other acid-neutralizing agent. Rinse area with water. Test area with litmus paper to insure neutralization is complete. Decontaminate the area thoroughly. Place all spill residues in an appropriate container and seal. Dispose residue in accordance to Federal, State and local regulations.

Unusual Fire and Explosion Hazards: This product is corrosive and presents a severe contact hazard to firefighters. When involved in a fire and exposed to extremely high temperatures, this product will decompose to produce acidic vapors and toxic gases (e.g., phosphine, phosphorous oxides). Flammable hydrogen gas may be generated by contact with metals. This solution will generate a small amount of heat when in contact with water.

Section 6 – Accidental Release Measures

Release Response: In case of a release, clear the affected area and protect people. Uncontrolled releases should be responded to by appropriately trained personnel in proper PPE, using pre-planned procedures. In terms of **SMALL, INCIDENTAL RELEASES** (e.g., 1 gallon from a leaking container), the minimum PPE should be as follows: gloves, goggles, face shield and appropriate body protection (e.g., boots, Tyvek suit). For **LARGE, NON-INCIDENTAL RELEASES** (e.g., 55-gallon drum), Minimum PPE should be **Level B: triple gloves (rubber gloves and nitrile gloves over latex), chemical resistant suit and boots, hardhat and Self-Contained Breathing Apparatus**. If necessary, dike the spill to prevent releases from contaminating environmentally sensitive areas. Absorb spilled liquid with polypads or other suitable absorbent materials. Neutralize area with sodium bicarbonate or other acid-neutralizing agent. Rinse area with water. Test area with litmus paper to insure neutralization is complete. Decontaminate the area thoroughly. Place all spill residues in an appropriate container and seal. Dispose residue in compliance with all Federal, State and local regulations.

Section 7 – Precautions for Safe Handling and Use

Precautions to Be taken in Handling and Storing: Store in cool, dry places away from direct sunlight and high sources of heat, or where freezing is possible. Store away from incompatible materials. Material should be stored in secondary containers or in a diked area, as appropriate. Use corrosion-resistant structural materials, lighting and ventilation system in storage area. Floors should be sealed to prevent absorption of this material. Keep container tightly closed when not in use. Keep away from children, feed and food products. Immediately clean up spills that occur during handling or storage.

Other Precautions: Consult local, State and Federal regulations pertaining to storage and disposal.

Section 8 – Control Measures / Personal Protection

Respiratory Protection (*Specify Type*): Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/HIOSH-approved respirator.

Ventilation: Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred.

Protective Gloves: Wear chemically protective gloves.

Eye Protection: Wear protective eyeglasses or chemical safety goggles. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses. Eyewash stations should be near the area where this product is stored / used.

Other Protective Clothing or Equipment: Use body protection appropriate to the task, to prevent prolonged or repeated skin contact.

Work / Hygienic Practices: Never eat, drink or smoke in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet or applying cosmetics.

Section 9 – Physical / Chemical Characteristics

Physical State:	Liquid	Specific Gravity (water=1)	1.40
Vapor Pressure (mm Hg.)	N/A	Density	11.7 lb/gal
Vapor Density (AIR=1)	N/A	Boiling Point	212 ° F
Solubility in Water:	Miscible	pH:	1.5 to 2.0
Appearance and Odor: Clear, colorless liquid with virtually no odor.			

Section 10 – Reactivity Data

Stability: Product stable at room temperature in closed containers under normal storage and handling conditions.

Chemical Incompatibilities: Strong bases, strong oxidizers, metals and water-reactive materials.

Conditions to avoid: Exposure to or contact with extreme heat and incompatible materials.

Hazardous Decomposition Products: When exposed to extremely high temperatures, the components of this product will decompose to produce irritating vapors and toxic gases (e.g., phosphorous oxides and phosphine).

Hazardous Polymerization: Will not occur.

Section 11 – Toxicological Information

Eye Effects: Severely Irritating and Corrosive.

Chronic Effects: No unusual chronic effects

Skin Effects: Severely Irritating and Corrosive.

Carcinogenicity: Not listed as carcinogenic

Acute Inhalation Effects: Severely Irritating and Corrosive.

Mutagenicity: Not listed as mutagenic

Acute Oral Effects: Not Determined

Teratogenicity: Unknown

Section 12 – Ecological Information

Soil Absorption / Mobility: Mobile in soil profile

Section 13 – Disposal Considerations

Disposal: Dispose of in an approved landfill or apply at recommended label rates.

Disposal Regulatory Requirement: Follow applicable Federal, State and local regulations.

Section 14 – Transport Information

Proper Shipping Name: Phosphorous Acid), 8, UN 2834, PG III, ERG #154.

Section 15 – Regulatory Information

SARA TITLE II HAZARD CATEGORY:	Immediate: Yes	Delayed: No
Sudden Release of Pressure: No	Fire: No	Reactive: No

CERCLA: None Listed.

SARA, TITLE III, SECTION 313: None Listed.

Section 16 – Other

Prepared by: Mike Barry

Reviewed by: Dennis Belau

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