

## SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## Schutze Reagent

AR611

This product is intended for laboratory use.

Alpha Resources Inc. 3090 Johnson Rd. Stevensville, MI 49127 (269)465-5559

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word: DANGER

## SECTION 2— HAZARDS IDENTIFICATION

**Hazard class:** Oxidizing solids (Category 2), Corrosive: Skin and Eye burns (Category 1A ,B, C), and Specific target organ toxicity-single exposure (Category 3).

**Hazard statement:** May intensify fire; oxidizer (H272), causes severe skin burn and eye damage (H314), causes serious eye irritation (H319), and may cause respiratory irritation (H335).

**Precautionary statement:** Keep away from heat (P210), keep/store away from cloth/combustible materials (P220), take any precaution to avoid mixing with combustibles (P221), avoid breathing dust/fume/gas/mist/vapor/spray (P261), wash skin thoroughly after handling (P264), use only outdoors or in a well-ventilated area (P271), wear protective gloves/eye protection/face protection (P280), If On Skin: wash with plenty of soap and water (P302+P352), if inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell (P304+P340+P312), if In Eyes: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing (P332+313), if eye irritation persists: get medical advice/attention (P337+P313), take off contaminated clothing and wash before reuse (P362), In case of fire: use dry sand, dry chemical, or alcohol-resistant foam for extinction (P370+P378), store in a well-ventilated place. Keep container tightly closed (P403+P233), Store locked up (P405), dispose of contents/container to an approved waste disposal plant (P501).

**Environmental Effects:** Components of this product are hazardous to aquatic life (Category 2). May cause long-term adverse effects in environment (H411).



## SECTION 3— COMPOSITION, INFORMATION ON INGREDIENTS

## Hazardous substance required for disclosure.

Schutze Reagent (Mixture)Component	CAS #	Common %
Sulphuric Acid (hazardous)	7664-93-9	>10
Silica Gel (hazardous)	112926-00-8	<70
Iodine Pentoxide	12029-98-0	>20

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## SECTION 4— FIRST AID MEASURES

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**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). If breathing is difficult qualified personnel may administer Oxygen. If not breathing give artificial respiration when qualified.

**If on skin:** Wash with plenty of water. (P302+P352). Wash contaminated clothing before reuse (P363). Consult physician.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

**If swallowed:** Rinse mouth. Call a poison center or physician.

**Additional Information:** Make certain that the medical personnel are aware of the materials that the individual was exposed to.

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## SECTION 5 — FIRE FIGHTING MEASURES

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**Flammable properties:** This material can cause fire when in contact with a combustible material. This product will accelerate burning when part of a fire.

**Extinguishing media:** Use extinguishing media that is appropriate for the circumstances and environment contained within fire hazard.

**Advice for Firefighters:** Use the necessary firefighting attire that would protect from extreme heat and flame. Wear self-contained breathing apparatus for firefighting when required. Use appropriate protocol while trying to contain the blaze and consider the other involved materials associated with this hazard.

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## SECTION 6 — ACCIDENTAL RELEASE MEASURES

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**Personal precautions:** Use the proper personal protective equipment that is available. Be careful to not generate any dust. Avoid breathing vapors, mist, or gas. Be sure to work under proper ventilation. Evacuate personnel to areas not affected. Avoid breathing any fine particles.

**Methods of cleanup:** Remove any ignition sources and keep combustibles away from release. This material can be swept up and placed in a sealed vessel for disposal. An electrically protected vacuum cleaner can be used to remove spill. Make sure to not stir up the dust because it can be harmful when inhaled. Wash the area with wet cloth after being swept up completely.

**Environmental precautions:** At all costs the discharge into environment must be avoided. This product should be prevented from entering any sewers and water sources. Prevent further leakage where necessary.

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## SECTION 7 — HANDLING AND STORAGE

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**Handling:** Keep sealed and don't breathe dust if produced. Wear appropriate clothing for protection. Where no ventilation is available a respirator will be required. Avoid the creation of dust and aerosols. Keep away from heat. Avoid contact with eyes, skin, and clothing. Keep prolonged exposure to a minimum.

**Storage:** This product should be stored in a cool, dry well ventilated place and kept sealed (P233) when not in use. Don't store near combustible materials.

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## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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**Exposure Limit Values:** Suphuric Acid OSHA (PEL), 1mg/m<sup>3</sup> ACGIH (TWA), 0.2mg/m<sup>3</sup> Thoracic fraction

Silica Gel OSHA (TWA), 0.8mg/m<sup>3</sup> (20mppcf)

**Engineering Controls:** This material should be handled in accordance to good lab practices in regards to safety and hygiene. Wash hands before breaks and at end of workday.

**Personal Protection:** Respiratory protection could be required if adequate ventilation has not been achieved. A full-face respirator type N100 or type P3 respirator cartridges as a backup to ventilation controls. If there is no ventilation in place, a full-face supplied air respirator is required. Use of government standard respirators or components should be used when necessary.

**Hand Protection:** Glove suitability will differ depending on the end use of product. Chemical resistant gloves can provide an excellent barrier of protection. Gloves should be inspected before use and proper glove removal techniques should be performed to avoid any contact with this material. Wash and dry hands after use.

**Eye/face protection:** Safety glasses with side shields are necessary if splashing is possible. An emergency eye wash station and emergency shower should be available in close proximity to work area.

**Skin and Body Protection:** Chemical and oil resistant clothing are recommended for extended periods of contact.

**Hygiene:** Wash hands and areas of possible exposure after handling material especially before eating, drinking, and smoking. The work clothing should also be washed regularly to remove any contaminants. Dispose of contaminated clothing that can't be deemed safe.

**Environmental:** DO NOT! Let product enter water ways or sewers.

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## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

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**Note: Physical and chemical properties are provided for safety, health, and environmental considerations only and may not represent the products specifications. Contact supplier for additional information.**

Solid pale yellow granules	Odorless	Relative Density: N/A
Melting Point: N/A	Boiling Point: N/A	Vapor Density: N/A
Refractive index: N/A	Soluble (water): N/A	
Flash point: N/A	Auto-Ignition Temperature: N/A	

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## SECTION 10 — STABILITY AND REACTIVITY

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**Stable** material at normal laboratory conditions.

**Avoid:** Don't create/disperse dust or powder. Keep excessive heat away from material.

**Incompatible:** Silica gel reacts with Hydrofluoric acid. Iodine pentoxide reacts with light, moisture, organic materials, strong reducing agents, and combustibles. Sulfuric acid reacts with moisture, heat, water, most metals, organic materials, strong bases, carbonates, sulfides, cyanides, strong oxidizing agents, and carbides.

**Hazardous Decomposition:** Iodine pentoxide can release iodine. Sulfuric acid can release oxides of sulfur and hydrogen.

**Hazardous Polymerization:** N/A

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## SECTION 11 — TOXICOLOGICAL INFORMATION

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**Toxicological effects:**

**Silica Gel:** Oral LD50, Mouse: >15000mg/kg      Oral LD50, Rat:>22500mg/kg

**Sulfuric Acid:** Inhalation LC50, Rat: 347mg/l, (1hr)      Oral LD50, Rat:2140mg/kg

**Acute effects:** Causes burns

**Local effects:** Can be irritating to the respiratory system. Respiratory irritation can be caused by inhalation of dust or fine particulates.

**Chronic effects:** OSHA considers this material hazardous. Prolonged exposure may cause chronic effects. Prolonged inhalation may be harmful to respiratory system.

**Carcinogenicity:** Silica gel is listed as 3 for (IARC monographs) not classifiable as to carcinogenicity to humans.

**Mutagenicity:** N/A

**Reproductive toxicity:** N/A

**Skin corrosion/irritation:** LISTED AS HAZARDOUS PER OSHA.

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## SECTION 12 — ECOLOGICAL INFORMATION

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**Eco-toxicity Data:** Sulfuric Acid

**Toxicity to fish:** LC50-Gambusia affinis (mosquito fish)-42mg/l (96hrs)

**Eco-toxicity:** Components of this material are hazardous to aquatic life.

**Harmful to aquatic life if discharged into streams or lakes.** An environmental hazard can't be excluded in the event of handling or disposing unprofessionally.

**Aquatic toxicity:** N/A

**Persistence and degradability:** N/A

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## SECTION 13 — DISPOSAL CONSIDERATIONS

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**Waste disposal:** Collect product and reclaim or dispose in sealed containers at a licensed waste disposal site. Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Hazardous Waste code:** The waste code should be assigned in discussion with the user, the producer, and the waste disposal company. Dispose in accordance with all applicable regulations.

**Waste from residues:** Dispose of in accordance with local regulations. Empty all containers or liners that may retain residues. This material and its container must be disposed of in a safe manner.

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

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## SECTION 14 — TRANSPORT INFORMATION

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DOT UN number: UN3085

Class: 5.1      Packing group: III      Subsidiary risk: 8

Proper shipping name: Oxidizing solid, corrosive, n.o.s. (Iodine Pentoxide 20% Sulphuric Acid 10%)

Labels: 5.1, 8      Special Provisions: 62, IB8, IP3, T1, TP33      Packaging exceptions: 152

Packaging non-bulk: 213      Packaging bulk:240

IMDG UN number: UN3085

Class: 5.1      Packing group: III      Subsidiary risk: 8

Proper shipping name: OXIDIZING SOLID, CORROSIVE, N.O.S. (Iodine Pentoxide 20% Sulphuric Acid 10%)

Marine pollutant: No      EmS: F-A, S-Q

IATA UN number: UN3085

Class: 5.1      Packing group: III      Subsidiary risk: 8

Proper shipping name: Oxidizing solid, corrosive, n.o.s. (Iodine Pentoxide 20% Sulphuric Acid 10%)

Environmental hazard: No      ERG Code 5C

**Special precaution for user:** Read safety instructions, SDS and emergency procedures before handling.

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## SECTION 15 — REGULATORY INFORMATION

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### Sulphuric Acid

This material is considered hazardous according to OSHA HazCom 2012, 29CFR 1910.1200

### U.S. Federal Regulations

**TSCA Status:** On Toxic Substance Control Act Inventory List.

**CERCLA Reportable Quantity:** 1000lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard Categories:** Immediate hazard, delayed hazard, and fire hazard.

**Section 303 extremely hazardous substance:** Not listed

**SARA 311/312 Hazardous chemical:** Yes

**SARA Section 313-Toxic chemicals:** CAS 7664-93-9 Sulphuric acid 1.0%

**Massachusetts Right to know components:** Silica gel (CAS#112926-00-8) and Sulphuric acid (CAS#7664-93-9)

**Pennsylvania Right to know components:** Sulphuric acid (CAS#7664-93-9)

**New Jersey Right to know components:** Silica gel (CAS#112926-00-8) and Sulphuric acid (CAS#7664-93-9)

**Rhode Island Right to know components:** Sulphuric acid (CAS#7664-93-9)

**California Prop. 65 Components:** This product does contain a chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**HMIS and NFPA Regulations**

HMIS/NFPA: Health: 3

Flammability: 0

Physical Hazard: 2

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**SECTION 16 — OTHER INFORMATION**

The data and information as stated was furnished by the manufacturer/vendor/supplier of this product. Alpha Resources Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.

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