

# LTS Research Laboratories, Inc. Safety Data Sheet Lithium Germanium Phosphorus Sulfide

#### 1. Product and Company Identification Trade Name: Lithium Germanium Phosphorus Sulfide Chemical Formula: LiGePS Scientific research and development Recommended Use: Manufacturer/Supplier: LTS Research Laboratories, Inc. 37 Ramland Road Street: City: Orangeburg State: New York 10962 Zip Code: Country: USA Tel #: 855-587-2436 / 855-lts-chem 24-Hour Emergency Contact: 800-424-9300 (US & Canada) +1-703-527-3887 (International) 2. Hazards Identification Signal Word: Warning arch ories, inc

Hazard Statements:

Precautionary Statements:

H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405: Store locked up.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

HMIS Health Ratings (0-4): Health: Flammability: Physical:

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3. Composition				
Chemical Family:	Ceramic			
Additional Names:	N/A			
Lithium Germanium Phosphorus Sulf	fide (LiGePS):			
Percentage:	100 wt%			
CAS #:	N/A			
EC #:	N/A			
	4. First Aid Procedures			
General Treatment:	Seek medical attention if symptoms persist.			
Special Treatment:	None			
Important Symptoms:	None			
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.			
Ingestion:	Seek medical treatment.			
Skin:	Wash affected area with mild soap and water. Remove any			
	contaminated clothing.			
Eyes:	Flush eyes with water, blinking often for several minutes. Remove			
	contact lenses if present and easy to do. Continue rinsing			
	5. Firefighting Measures			
Flammability:	Non-flammable			
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for			
Extinguishing Media.	surrounding material and type of fire.			
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective			
spee. The Fighting Floeedure.	clothing to prevent contact with skin and eyes. See section 10 for			
	decomposition products.			
	6. Accidental Release Measures			
If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in			
	special protection information. Isolate spill area and provide			
	ventilation. Vacuum up spill using a high efficiency particulate			
	absolute (HEPA) air filter and place in a closed container for disposal.			
	Take care not to raise dust.			
Environmental Precautions:	Isolate runoff to prevent environmental pollution.			
	7. Handling and Storage			
Handling Conditions:	Wash thoroughly after handling.			
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from			
XX7	materials and conditions listed in section 10.			
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before			
	eating and smoking. Do not blow dust off clothing or skin with			
<b>T</b> 7 (*1 (*	compressed air.			
Ventilation:	Provide sufficient ventilation to maintain concentration at or below			
	threshold limit.			

8. Exp	osure Controls and Personal Protection
Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long
	sleeves/pants.
9. P	nysical and Chemical Characteristics
Color	N/A
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular weight:	N/A
	10. Reactivity
Stability:	Stable under recommended storage conditions
Reacts With:	Oxidizing agents
Incompatible Conditions:	None None
Hazardous Decomposition Products:	Phosphorus Oxides, Lithium Oxides, Metal oxide fume
	11. Toxicological Information
Potential Health Effects:	
Eyes:	Causes serious eye irritation
Skin:	Causes skin irritation
Ingestion:	Harmful if swallowed
Inhalation:	May cause irritation
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A N/A
Aggravated Medical Conditions:	N/A
Aggravated Medical Conditions: Median Lethal Dose:	N/A N/A
Aggravated Medical Conditions: Median Lethal Dose: Carcinogen: Aquatic Toxicity:	N/A N/A N/A 12. Ecological Information N/A
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Aggravated Medical Conditions: Median Lethal Dose: Carcinogen: Aquatic Toxicity: Persistent Bioaccumulation Toxicity:	N/A N/A N/A 12. Ecological Information N/A N/A N/A N/A May cause long lasting harmful effect on aquatic life.
Aggravated Medical Conditions: Median Lethal Dose: Carcinogen: Aquatic Toxicity: Persistent Bioaccumulation Toxicity: Very Persistent, Very Bioaccumulative:	N/A         N/A         N/A         12. Ecological Information         N/A         N/A         N/A         N/A         N/A         Do not allow material to be released to the environment without proper
Aggravated Medical Conditions: Median Lethal Dose: Carcinogen: Aquatic Toxicity: Persistent Bioaccumulation Toxicity: Very Persistent, Very Bioaccumulative:	N/A         N/A         N/A         12. Ecological Information         N/A         N/A         N/A         N/A         N/A         N/A         N/A         N/A         N/A         May cause long lasting harmful effect on aquatic life.
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Do not allow product to reach any water sources.

## 13. Disposal Considerations

### Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data				
Hazardous:	Not hazardous for transportation.			
Hazard Class:	N/A			
Packing Group:	N/A			
UN Number:	N/A			
Proper Shipping Name:	N/A			
	15. Regulatory Information			
Sec 302 Extremely Hazardous:	N/A			
Sec 304 Reportable Quantities:	N/A			
Sec 313 Toxic Chemicals:	N/A			

### 16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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07/05/17