



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# Aluminum sulfide: sc-268507



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1 Identification of substance:

**Product Name:** Aluminum sulfide

**Catalog Number:** sc-268507

**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, California 95060  
800.457.3801 or 831.457.3800

**Emergency:** ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255  
(1-800-CHEMCALL) or call +613 9573 3112

### 2 Hazards identification

**Classification of the substance or mixture**



GHS02 Flame

H261 In contact with water releases flammable gas.



GHS07

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

R14-31: Reacts violently with water. Contact with acids liberates toxic gas.

**Label elements**

**Labelling according to EU guidelines:**

**Code letter and hazard designation of product:**

Xi Irritant

**Risk phrases:**

14 Reacts violently with water.  
31 Contact with acids liberates toxic gas.  
36/37/38 Irritating to eyes, respiratory system and skin.

**Safety phrases:**

8 Keep container dry.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37 Wear suitable gloves.

**Hazard description:**

**WHMIS classification**

B6 - Reactive flammable material  
D1B - Toxic material causing immediate and serious toxic effects  
D2B - Toxic material causing other toxic effects



**Classification system**  
**HMIS ratings (scale 0-4)**  
**(Hazardous Materials Identification System)**

HEALTH	2	Health (acute effects) = 2
FIRE	0	Flammability = 0
REACTIVITY	2	Reactivity = 2

**Other hazards**

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

### 3 Composition/information on ingredients

**Chemical characterization: Substances**

**(CAS#) Description:**

Aluminum sulfide (CAS# 1302-81-4)

**Identification number(s):**

**EINECS Number:** 215-109-0

### 4 First aid measures

**Description of first aid measures**

**General information**

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing has been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

**After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

**After skin contact**

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

**After eye contact**

Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing**

Do not induce vomiting; immediately call for medical help.

Seek immediate medical advice.

### 5 Firefighting measures

**Extinguishing media**

**Suitable extinguishing agents** CO2, sand, extinguishing powder. Do not use water.

**For safety reasons unsuitable extinguishing agents** Water

**Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Metal oxide fume

Sulfur oxides (SOx)

Hydrogen sulfide

**Advice for firefighters**

**Protective equipment:**

Wear self-contained respirator.

Wear fully protective impervious suit.

### 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

**Environmental precautions:**

Do not allow material to be released to the environment without proper governmental permits.

**Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

### Handling

#### Precautions for safe handling

Handle under dry protective gas.  
Keep container tightly sealed.  
Store in cool, dry place in tightly closed containers.  
Ensure good ventilation at the workplace.  
Open and handle container with care.

**Information about protection against explosions and fires:** No information known.

#### Conditions for safe storage, including any incompatibilities

##### Storage

**Requirements to be met by storerooms and receptacles:** No special requirements.

#### Information about storage in one common storage facility:

Do not store together with acids.

Store away from water/moisture.

Store away from oxidizing agents.

#### Further information about storage conditions:

Store under dry inert gas.

This product is moisture sensitive.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Protect from humidity and water.

## 8 Exposure controls/personal protection

#### Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

#### Control parameters

**Components with limit values that require monitoring at the workplace:** Not required.

**Additional information:** No data

#### Exposure controls

##### Personal protective equipment

##### General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

**Breathing equipment:** Use suitable respirator when high concentrations are present.

##### Protection of hands:

Impervious gloves

Check protective gloves prior to each use for their proper condition.

##### Material of gloves

The selection of suitable gloves not only depends on the material, but also on quality.

Quality will vary from manufacturer to manufacturer.

**Eye protection:** Safety glasses

**Body protection:** Protective work clothing.

## 9 Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

##### Appearance:

Form:	Granules
Color:	Yellowish
Odor:	Like rotten eggs
Odour threshold:	Not determined.

pH-value:	Not applicable.
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##### Change in condition

Melting point/Melting range:	1100°C (2012°F)
Boiling point/Boiling range:	1500°C (2732°F)
Sublimation temperature / start:	Not determined

<b>Molecular Weight:</b>	150.16
<b>Molecular Formula:</b>	$Al_2S_3$
<b>Flash point:</b>	Not applicable
<b>Flammability (solid, gaseous)</b>	Not determined.
<b>Ignition temperature:</b>	Not determined
<b>Decomposition temperature:</b>	Not determined
<b>Auto igniting:</b>	Not determined.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.
<b>Explosion limits:</b>	
Lower:	Not determined
Upper:	Not determined
<b>Vapor pressure:</b>	Not applicable.
<b>Density at 20°C (68°F):</b>	2.02 g/cm <sup>3</sup> (16.857 lbs/gal)
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Solubility in / Miscibility with</b>	
Water:	Reacts Reacts violently
<b>Segregation coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
dynamic:	Not applicable.
kinematic:	Not applicable.
<b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

### Reactivity

#### Chemical stability

#### Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

**Possibility of hazardous reactions** No dangerous reactions known

#### Incompatible materials:

Acids

Water/moisture

Oxidizing agents

#### Hazardous decomposition products:

Metal oxide fume

Sulfur oxides (SO<sub>x</sub>)

Hydrogen sulfide

## 11 Toxicological information

### Information on toxicological effects

#### Acute toxicity:

#### Primary irritant effect:

**on the skin:** Irritant to skin and mucous membranes.

**on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

#### Subacute to chronic toxicity:

Aluminum may be implicated in Alzheimers disease. Inhalation of aluminum containing dusts may cause pulmonary disease.

#### Subacute to chronic toxicity:

Sulfides show variable toxicity. The alkaline sulfides are similar in action to alkalis. They cause irritation of the skin and are corrosive by ingestion. The heavy metal sulfides are generally insoluble and show little toxic action except through the liberation of hydrogen sulfide. Hydrogen sulfide, if generated, is toxic, a severe irritant and flammable. Effects include conjunctivitis, headache, nausea, dizziness, coughing, pulmonary edema and possibly death.

#### Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Danger through skin absorption.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

## 12 Ecological information

### Toxicity

**Acquatic toxicity:** No further relevant information available.

**Persistence and degradability** No further relevant information available.

**Behavior in environmental systems:**

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** No further relevant information available.

**Additional ecological information:**

**General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

## 13 Disposal considerations

**Waste treatment methods**

**Recommendation** Consult state, local or national regulations to ensure proper disposal.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

**DOT regulations:**



**Hazard class:** 4.3

**Identification number:** UN3134

**Packing group:** III

**Proper shipping name (technical name):** WATER-REACTIVE SOLID, TOXIC, N.O.S. (Aluminum sulfide)

**Label:** 4.3+6.1

**Land transport ADR/RID (cross-border)**



**ADR/RID class:** 4.3 (WT2) Substances which, in contact with water, emit flammable gases

**Danger code (Kemler):** 462

**UN-Number:** 3134

**Packaging group:** III

**UN proper shipping name:** 3134 WATER-REACTIVE SOLID, TOXIC, N.O.S. (Aluminum sulfide)

**Maritime transport IMDG:**



**IMDG Class:** 4.3

**UN Number:** 3134

**Label:** 4.3+6.1

**Packaging group:** III

**Marine pollutant:** No

**Proper shipping name:** WATER-REACTIVE SOLID, TOXIC, N.O.S. (Aluminum sulfide)

**Air transport ICAO-TI and IATA-DGR:**



**ICAO/IATA Class:** 4.3  
**UN/ID Number:** 3134  
**Label:** 4.3+6.1  
**Packaging group:** III  
**Proper shipping name:** WATER-REACTIVE SOLID, TOXIC, N.O.S. (Aluminum sulfide)

**UN "Model Regulation":** UN3134, WATER-REACTIVE SOLID, TOXIC, N.O.S., 4.3 (6.1), III  
**Special precautions for user**  
*Warning: Substances which, in contact with water, emit flammable gases*  
**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

## 15 Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Substance is not listed.

**Product related hazard informations:**

**Hazard symbols:**

Xi Irritant

**Risk phrases:**

14 Reacts violently with water.  
31 Contact with acids liberates toxic gas.  
36/37/38 Irritating to eyes, respiratory system and skin.

**Safety phrases:**

8 Keep container dry.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
37 Wear suitable gloves.

**National regulations**

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Non-Domestic Substances List (NDSL).

**Information about limitation of use:** For use only by technically qualified individuals.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information:

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

05/09/2011