

# MATERIAL SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) &amp; 2015/830

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product Details

Product Name	Gallium selenide powder
Synonyms	Gallium (II) selenide, Selanylidenegallium
Chemical Name	Gallium selenide
Chemical Formula	GaSe
Product Code	M2138C
CAS No.	12024-11-2
EC No.	234-689-6
REACH No.	A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals
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### 1.3. Supplier details

Company Identification	Ossila Limited
Address of Supplier	Solpro Business Park Windsor Street, Sheffield
Postal Code	S4 7WB, UK
Telephone	0114 2999 180
Email address	info@ossila.com

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) 1272/2008 (CLP)

Acute Tox. 3 – Ingestion  
Acute Tox. 3 – Inhalation  
STOT RE 2  
Aquatic Acute 1  
Aquatic Chronic 1

### 2.2. Label elements

#### Regulation (EC) 1272/2008 (CLP)



#### Hazard Pictogram(s)

**Signal Word(s)** Danger

#### Hazard Statements

H301	Toxic if swallowed
H331	Toxic if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**Precautionary Statements**

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405	Store locked up.
P501	Dispose of contents in accordance with local, state or national legislation.

**2.3. Other hazards**

None.

**3. Composition/Information on ingredients****3.1. Substances**

Hazardous ingredient(s)	CAS No.	EC No.	%W/W	Hazard Statement(s)
Gallium selenide	12024-11-2	234-689-6	≤ 100	Acute Tox. 3: H301+H331 STOT RE 2: H373 Aquatic Acute 1: H400 Aquatic Chronic 1: H410

**4. First aid measures****4.1. Description of first aid measures**

<b>Inhalation</b>	Call a poison centre/doctor
<b>Skin contact</b>	Wash with soap and water. Get medical attention if you feel unwell.
<b>Eye contact</b>	Flush with copious amounts of water as a precaution. Get medical attention if you feel unwell.
<b>Ingestion</b>	Rinse out mouth with water. Immediately call a poison centre/doctor.

**4.2. Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in section 11.

**4.3. Indication of any immediate medical attention and special treatment needed**

Get medical attention if you feel unwell. Treat symptomatically.

**5. Fire fighting****5.1. Extinguishing media****Suitable extinguishing media:** As appropriate for surrounding fire.**5.2. Special hazards arising from the substance of mixture**

May decompose in a fire, giving off toxic and irritant vapours.

**5.3. Advice for firefighters**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment (section 8). Avoid dust formation. Ensure room is well ventilated.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Containment and cleaning

Contain and clean up spill if safe to do so using an electrically protected vacuum cleaner or by wet-brushing. Dispose of dry waste in closed container for proper disposal according to local regulations.

## 7. Handling and storage

### 7.1. Precautions for safe handling

Avoid formation of dust and aerosols. Provide exhaust ventilation in places where dust is formed.

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

Store in a cool, dry and well-ventilated place inside of a tightly sealed container. Reseal containers that have been opened and keep upright to prevent leakage. Store locked up.

**Storage temperature** Ambient  
**Storage life** Stable under normal conditions.

### 7.3. Specific end uses

Use in laboratories.

## 8. Exposure controls / Personal protection

### 8.1. Control parameters

#### 8.1.1 Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

### 8.2. Exposure controls

#### 8.2.1 Engineering measures

Handle in accordance with good industrial engineering/laboratory practices for hygiene and safety. Ensure eyewash stations and safety showers are close to the laboratory workstation. Ensure good general ventilation is present when handling the product.

#### 8.2.2 Personal protective equipment

**Eye Protection** Wear safety glasses with side-shields conforming to appropriate government standards such as NOISH (US) or EN166 (EU).  
**Skin Protection** Wear protective clothing and gloves. Use gloves that satisfy the specifications of your national standards (e.g. EN 374). Wash hands after handling. Wash contaminated clothing after use.  
**Respirators:** Use multi-purpose combination particle respirator N99 (US) or type ABEK P2 (EN 14387) respirator cartridges as a backup to engineering controls. Respirators should be approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### 8.2.3 Environmental Exposure Controls

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	Solid dark copper powder
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting/freezing point	960 °C
Boiling point/range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: <i>n</i> -octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

### 9.2. Other safety information

No data available.

## 10. Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2. Chemical stability

Stable under normal temperatures and pressures under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

Strong oxidising agents.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## 11. Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Toxic if swallowed or if inhaled.

**Skin corrosion/irritation**

No data available.

**Serious eye damage/irritation**

No data available.

**Respiratory sensitisation**

No data available.

**Skin sensitisation**

No data available.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT - single exposure**

No data available.

**STOT - repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

No data available.

**Routes of exposure**

Eye contact, ingestion, inhalation, skin contact.

**Signs and Symptoms of Exposure**

No data available.

## 11.2 Other information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. Ecological information

### 12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

No data available.

### 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

### 12.6. Other adverse effects

No data available.

## 13. Disposal

### 13.1. Waste treatment methods

**Product**

Observe all federal, state and local environmental regulations and directives on waste and hazardous waste. Offer surplus material to a licensed professional waste disposal professional.

**Contaminated packaging**

Dispose of as unused product.

**14. Transport****14.1 UN number**

3283

**14.2 UN proper shipping name**

Selenium Compound, Solid, N.O.S.

**14.3 Transport hazard class(es)**

ADR/RID Class	6.1
IMDG Class	6.1
IATA	6.1

**14.4 Packing group**

III

**14.5 Environmental hazards**

Classified as a Marine Pollutant.

**14.6 Special precautions for user**

Not known.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

No information available.

**15. Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006, the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

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

No data available.

**15.2 Chemical safety assessment**

No chemical safety report/assessment was carried out for this product.

**16. Other information****LEGEND**

Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community  
EINECS : European Inventory of Existing Commercial Chemical Substances  
IATA : International Air Transport Association  
IBC : Intermediate Bulk Container  
ICAO : International Civil Aviation Organization  
IMDG : International Maritime Dangerous Goods  
LTEL : Long term exposure limit  
PBT : Persistent, Bioaccumulative and Toxic  
PNEC : Predicted No Effect Concentration  
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals  
RID : Regulations concerning the International Carriage of Dangerous Goods by Rail  
STEL : Short term exposure limit  
STOT : Specific Target Organ Toxicity  
UN : United Nations  
vPvB : very Persistent and very Bioaccumulative

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