



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

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	Lead II Sulphate 98%
Trade Name	Lead II Sulphate 98%
Synonyms	Anglesite
Chemical Formula	PbSO ₄
Product code	GPC307734
CAS No.	7446-14-2
EC No.	231-198-9
REACH Registration No.	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Identified Use(s)	PC21 Laboratory chemicals
Uses Advised Against	Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer	
Company Identification	Atom Scientific Ltd
Address of Manufacturer	Unit 2B East Tame Business Park Rexcine Way Hyde Cheshire
Postal code	SK14 4GX
Telephone:	0161 3665123
Fax	01704 337167
E-mail	technical@atomscientific.com
Office hours	08:00 - 17:00
Supplier	
Company Identification	Atom Scientific Ltd
Address of Supplier	Unit 2B East Tame Business Park Rexcine Way Hyde Cheshire
Postal code	SK14 4GX
Telephone:	0161 3665123
Fax	01704 337167
E-mail	technical@atomscientific.com
Office hours	08:00 - 17:00

1.4 Emergency telephone number



Emergency Phone No. 07833453806
 Contact Peter Keenan

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP) Acute Tox. 4 :Harmful if inhaled.
 Acute Tox. 4 :Harmful if swallowed.
 Aquatic Acute 1 :Very toxic to aquatic life.
 Aquatic Chronic 1 :Very toxic to aquatic life with long lasting effects.
 Repr. 1A :May damage fertility or the unborn child.
 STOT RE 2 :May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)
 Product Name Lead II Sulphate 98%

Hazard Pictogram(s)



GHS08



GHS07



GHS09

Signal Word(s)

Danger

Hazard Statement(s)

H302: Harmful if swallowed.
 H332: Harmful if inhaled.
 H360: May damage fertility or the unborn child.
 H373: May cause damage to organs through prolonged or repeated exposure.
 H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

P201: Obtain special instructions before use.
 P260: Do not breathe dust/fume/gas/mist/vapours/spray.
 P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P308+P313: IF exposed or concerned: Get medical advice/attention.
 P330: Rinse mouth.

2.3 Other hazards

None known.

2.4 Additional Information



For full text of H/P Statements see section 16.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
lead sulphate	7446-14-2	231-198-9	98	Acute Tox. 4 H302 Acute Tox. 4 H332 Repr. 1A H360 STOT RE 2 H373 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	GHS08 GHS07 GHS09

3.2 Mixtures

Not applicable.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Call a POISON CENTER/doctor if you feel unwell.
Skin Contact	IF exposed or concerned: Get medical advice/attention.
Eye Contact	IF exposed or concerned: Get medical advice/attention.
Ingestion	Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2 Most important symptoms and effects, both acute and delayed

Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

Call a POISON CENTER/doctor if you feel unwell. Treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media	As appropriate for surrounding fire.
Unsuitable extinguishing media	None.

5.2 Special hazards arising from the substance or mixture

May decompose in a fire giving off toxic fumes.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Dike fire control water for later disposal.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES



6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid dust generation. Do not breathe dust. Ensure full personal protection (including respiratory protection) during removal of spillages.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Collect spillage. Sweep up spilled substance and remove to safe place. Use vacuum equipment for collecting spilt materials, where practicable. Contain spillages with sand, earth or any suitable adsorbent material. Earth may be shovelled to contain spillage and to avoid contamination of sewers and watercourses.

6.4 Reference to other sections

See Also Section 8, 13.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

Potassium, Strong bases

7.3 Specific end use(s)

PC21 Laboratory chemicals

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits No Occupational Exposure Limit assigned.

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Inorganic leads and its compounds	7446-14-2	0	0.15	0	0	BOELV



Region	Source
EU	EU Occupational Exposure Limits
United Kingdom	Workplace Exposure Limits (WEL)

Remark	Notes
BOELV	Binding Occupational Exposure Limit Values.

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use with ventilation, local exhaust ventilation or breathing protection.

8.2.2. Personal protection equipment



Eye Protection Wear eye protection with side protection (EN166).



Skin protection Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection A suitable dust mask or dust respirator with filter type P (EN143 or EN405) may be appropriate.



Thermal hazards None known.

8.2.3. Environmental Exposure Controls Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Solid.
	Colour : beige
Odour	Not known.
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	Not known.
Initial boiling point and boiling range	Not applicable.
Flash Point	Not applicable.
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	Not known.



Relative density	6.2 g/cm ³ at 25 °C
Solubility(ies)	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.
9.2 Other information	None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

None anticipated.

10.5 Incompatible materials

Potassium, Strong bases

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sulphur oxides,
Lead oxides
Other decomposition products - No data available
In the event of fire: see section 5

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Harmful if swallowed.
Acute toxicity - Skin Contact	Not classified.
Acute toxicity - Inhalation	Harmful if inhaled.
Skin corrosion/irritation	Not classified.
Serious eye damage/irritation	Not classified.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
	Human leukocyte



Carcinogenicity	Sister chromatid exchange Hamster ovary Sister chromatid exchange Not classified. IARC: 2A - Group 2A: Probably carcinogenic to humans (Lead sulphate)
Reproductive toxicity	May damage fertility or the unborn child. Known human reproductive toxicant
Lactation	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified.

11.2 Other information

RTECS: OG4375000

Lead salts have been reported to cross the placenta and to induce embryo- and feto- mortality. They also have teratogenic effect in some animal species. No teratogenic effects have been reported with exposure to organometallic lead compounds. Adverse effects of lead on human reproduction, embryonic and fetal development, and postnatal (e.g., mental) development have been reported. Excessive exposure can affect blood, nervous, and digestive systems. The synthesis of hemoglobin is inhibited and results in anemia. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result. Additional symptoms of overexposure include: joint and muscle pain, weakness of the extensor muscles (frequently the hand and wrist), headache, dizziness, abdominal pain, diarrhea, constipation, nausea, vomiting, blue line on the gums, insomnia, and metallic taste. High body levels produce increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity - Aquatic invertebrates	Very toxic to aquatic life with long lasting effects. EC50 - Daphnia magna (Water flea) - 0.36 mg/l - 48 h
Toxicity - Fish	LC50 - Cynoglossus joyneri - 0.75 mg/l - 96 h
Toxicity - Algae	Not known.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and Degradation



Not readily biodegradable.

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

Not known.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of contents in accordance with local, state or national legislation. Dispose of this material and its container to hazardous or special waste collection point.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 3077

14.2 UN proper shipping name

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class 9

ADR Classification Code M7

Special Provisions 274 335 375 601

Limited Quantities 5 kg

Excepted Quantities E1

Emergency Action Code 2Z

Mixed Packing Instructions for Packages P002 IBC08 LP02 R001

Special Packing Provisions for Packages PP12 B3

Mixed Packing Instructions for Packages MP10

Packing Instructions for Portable Tanks T1 BK1 BK2 BK3

Special Provisions for Portable Tanks TP33

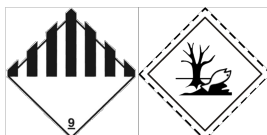
Tank Code for Tanks SGAV LGBV

Special Provisions for Tanks

Vehicle for Tank Carriage AT



ADR Transport Category	3
Tunnel Restriction Code	-
Special Provisions for Carriage - Packages	V13
Special Provisions for Carriage - Bulk	VC1 VC2
Special Provisions for Carriage - Loading, Unloading and Handling	CV13
Special Provisions for Carriage - Operation	
ADR HIN	90
IMDG	
IMDG Class	9
Special Provisions	274 335 375 601
Limited Quantities	5 kg
Excepted Quantities	E1
Mixed Packing Instructions for Packages	P002 IBC08 LP02 R001
Special Packing Provisions for Packages	PP12 B3
Packing Instructions for Portable Tanks	T1 BK1 BK2 BK3
Special Provisions for Portable Tanks	TP33
IMDG EMS	F-A, S-F
Stowage and Handling	Category A SW23
Segregation	
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y956
Passenger and Cargo Aircraft Limited Quantities Max net Qty	30Kg
Passenger and Cargo Aircraft Packing Instructions	956
Passenger and Cargo Aircraft Max net Qty	400Kg
Cargo Aircraft Packing Instructions	956
Cargo Aircraft Max net Qty	400Kg
Special Provisions	A97, A158, A179, A197
Emergency Response Guidebook (ERG) Code	9L
Labels	
Labels	9



**14.4 Packing group**

Packing group

14.5 Environmental hazards

Environmental hazards Classified as a Marine Pollutant.

14.6 Special precautions for user

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. SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very Not listed

High Concern for Authorisation

REACH: ANNEX XIV list of substances Not listed

subject to authorisation

REACH: Annex XVII Restrictions on the Lead sulphates: (a) PbSO₄ (7446-14-2)

manufacture, placing on the market and

use of certain dangerous substances,

mixtures and articles

Community Rolling Action Plan (CoRAP) Not listed

Regulation (EC) N° 850/2004 of the Not listed

European Parliament and of the Council

on persistent organic pollutants

Regulation (EC) N° 2037/2000 on Not listed

substances that deplete the ozone layer

Regulation (EU) N° 649/2012 of the Not listed

European Parliament and of the Council

concerning the export and import of

hazardous chemicals

National regulations

Other Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND



Hazard Pictogram(s)



GHS08



GHS07



GHS09

Hazard classification

Acute Tox. 4 : Acute toxicity, Category 4

Aquatic Acute 1 : Hazardous to the aquatic environment, Acute, Category 1

Aquatic Chronic 1 : Hazardous to the aquatic environment, Chronic, Category 1

Repr. 1A : Reproductive toxicity, Category 1A

STOT RE 2 : Specific target organ toxicity — repeated exposure, Category 2

Hazard Statement(s)

H302: Harmful if swallowed.

H332: Harmful if inhaled.

H360: May damage fertility or the unborn child.

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 Statement(s)

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands and exposed skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P312: Call a POISON CENTER/doctor if you feel unwell.

P314: Get medical advice/attention if you feel unwell.

P330: Rinse mouth.

P391: Collect spillage.



Acronyms

P405: Store locked up.

P501: Dispose of contents in accordance with local, state or national legislation.

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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