

SAFETY DATA SHEET

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

1.1 Product identifier

Product Name:Aluminium Sulphate Solid/GroundDatasheet Number:041Chemical Name:Aluminium sulphate

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

Pool / spa treatment

1.3 Details of the supplier of the safety data sheet

Name of Supplier: Address of Supplier: Isell Ltd Unit 5 Penrose House Treleigh Ind Est Redruth TR16 4DE 01326 371482 info@pure-spa.co.uk

Telephone: Fax: Responsible Person: Email:

1.4 Emergency telephone number

09062 655005

2 Hazards identification

2 .1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
 - Eye Irrit. 1, H318
 - Additional information: For full text of Hazard-statements: see section 16

2.2 Label elements according to Regulation (EC) No 1272/2008





2 Hazards identification (....)

- Signal Word: Danger
 - Symbols: GHS05

Hazard phrases

- Harmful if swallowed.
- Causes serious eye damage.

Precautionary Phrases

- Store locked up/Keep out of reach of children.
- Wear protective gloves/ protective clothing/ eye protection / face protection.
- IF SWALLOWED: Immediately call a POISON CENTRE/Doctor.

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- In case of fire: Do not breathe dust/fume/gas/mist/vapours/spray.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- 2.3 Other hazards
 - For Results of PBT and vPvB assessment see section 12.5.

3 Composition/information on ingredients

3.1 Mixtures

Chemical Name	Concentration	CAS Number	EC Number	R/H Phrases*	Symbols
Aluminium Sulphate	< 100%	10043-01-3	233-135-0	H318	GHS05

*See Section 16

4 First aid measures

4 .1 Description of first aid measures

- Take off all contaminated clothing immediately.
- IF INHALED: Remove to fresh air. If symptoms call a physician. If breathing is irregular or stopped,
- administer artificial respiration. If unconscious place in recovery position.
- IF ON SKIN: Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
- IF IN EYES: Rinse immediately with plenty of water, also under the eyelids for at least 5 minutes. Consult an eye specialist immediately. Go to an opthalmic hospital if possible.

- IF SWALLOWED: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.



4 First aid measures (....)

- 4 .2 Most important symptoms and effects, both acute and delayed
 - Causes damage to the eyes
 - Causes irritation
 - Causes nausea/vomiting
- 4.3 Indication of immediate medical attention and special treatment needed
 - Treat symptomatically

5 Fire-fighting measures

- 5.1 Extinguishing media
 - In case of fire: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
- 5.2 Special hazards arising from the substance or mixture
 - Incomplete combustion may form toxic pyrolysis products.
- 5.3 Advice for firefighters
 - Wear self contained breathing apparatus.
 - Wear protective equipment
 - Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 - User personal protective equipment.
 - Avoid contact with skin and eyes.
 - Do not breathe vapours or spray mist.
 - For personal protections see section 8.
- 6.2 Environmental Precautions
 - Do not flush into surface water or sanitary sewer system.
- 6.3 Methods and material for containment and cleaning up
 - Use mechanical handling equipment. Keep in suitable closed containers for disposal.
 - Absorb with liquid binding material (sand, diatomite, acid binders, universal binders)
- 6 .4 Reference to other sections
 - For personal protection see section 8.

7 Handling and storage

- 7 .1 Precautions for safe handling
 - Keep container tightly closed.
 - Ensure adequate ventilation.
 - Avoid contact with skin, eyes and clothing.
 - Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.
- 7.2 Conditions for safe storage, including any incompatibilities
 - Keep only in the original container.
 - Keep tightly closed in a dry and cool place. Keep away from heat.
 - Keep away from food, drink and animal feedingstuffs.



7 Handling and storage (....)

7 .3 Specific end use(s)

- No information available.

8 Exposure controls/personal protection

8.1 Control parameters

Aluminium Sulphate

- EH40 Workplace exposure limits (WELs), as amended, Time Weighted Average (TWA) : 2mg/m3
- ELV (IE), Time Weighted Average (TWA) : 2mg/m3
- 8 .2 Exposure controls
 - Refer to protective measures listed in sections 7 and 8.

Occupational exposure controls

- Wear rubber gloves
- When handling this substance, e.g. sampling, wear tightly fitting goggles giving complete eye protection
- Wear personal protective equipment.



9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Form : Powder Granules
 - Colour : White
 - Odour : No Significant
 - Odour threshold : no data available
 - pH : no data available
 - Melting point/range : 120°C 140°C
 - Boiling point/Boiling range : 770°C yes
 - Flashpoint : no data available
 - Evaporation rate : no data available
 - Flammability (solid, gas) : no data available
 - Upper explosion limit : no data available
 - Lower explosion limit : no data available
 - Vapour pressure : no data available
 - Relative vapour density : no data available
 - Density : 1.161 g/cm3
 - Water solubility : soluble
 - Partition coefficient : n-octanol/water : no data available
 - Auto-ignition temperature : no data available
 - Thermal decomposition : no data available
 - Viscocity, dynamic : no data available
 - Explosivity : no data available
 - Oxidising properties : no data available
- 9.2 Other information
 - No information available



10 Stability and reactivity

- 10.1 Reactivity
 - no information available
- 10 .2 Chemical stability Stable under normal conditions.
- 10.3 Possibility of hazardous reactions
 - no information available
- 10 .4 Conditions to avoid Avoid dust formation.
- 10 .5 Incompatible materials
 - Incompatible with alkalis
- 10 .6 Hazardous Decomposition Products
 - Sulphur oxides, Heating may cause toxic fumes.

11 Toxicological information

11 .1 Information on toxicological effects

Contact with eyes

- Risk of serious damage to eyes.
- Dust in the eyes may cause mechanical irritation.

Sensitisation

- Not sensitizing.

12 Ecological information

- 12 .1 Toxicity
 - Very toxic to aquatic life with long lasting effects.

12 .2 Persistence and degradability

- Not readily biodegradable
- 12.3 Bioaccumulation Potential
 - No information available
- 12.4 Mobility in soil
 - No information available
- 12 .5 Results of PBT and vPvB assessment
 - No information available
- 12 .6 Other Adverse Effects
 - Do not flush into surface water or sanitary sewer system.
 - Avoid subsoil penetration.



13 Disposal considerations

13 .1 Waste treatment methods

- Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.
- Packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

Classification

- No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established with the regional waste disposer.

14 Transport information

Not dangerous goods for ADR, RID, IMDG and IATA

- 14.1 UN Number
 - Not applicable
- 14.2 UN Proper Shipping Name
 - Not applicable
- 14.3 Transport hazard class(es)
- Not applicable
- 14.4 Packing group
 - Not applicable
- 14 .5 Environmental hazards
 - Not applicable
- 14 .6 Special precautions for user

- Not applicable

- 14 .7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
 - IMDG : Not applicable

15 Regulatory information

15 .1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- 15 .2 Chemical Safety Assessment
 - No data available



16 Other information

Full text of H-Statements referred to under sections 2 and 3.

- H318 : Causes serious eye damage.

Abbreviations and Acronyms.

- BCF : Bioconcentration factor
- BOD : Biochemical oxygen demand
- CAS : Chemical abstracts service
- CLP : Classification, Labelling and Packaging
- CMR : Carcinogenic, mutagenic or toxic to reproduction
- COD : Chemical oxygen demand
- DNEL : Derived no-effect level
- EINECS : European inventory of existing commercial chemicals substances
- ELINCS : European list of notified chemical substances
- GHS : Globally harmonized system of classification and labelling of chemicals
- LC50 : Median lethal concentration
- LOAEC : Lowest observed adverse effect concentration
- LOAEL : Lowest observed adverse effect level
- LOEL : Lowest observed effect level
- NLP : No-longer polymer
- NOAEC : No observed adverse effect concentration
- NOAEL : No observed adverse effect level
- NOEC : No observed effect concentration
- NOEL : No observed effect level
- OEL : Occupational exposure limit
- PBT : Persistant, bioaccumulative and toxic
- Reach Auth No : Reach Authorisation Number
- Reach AuthAppC No : Reach Authorisation Application Consultation Number
- PNEC : Predicted no-effect concentration
- STOT : Specific target organ toxicity
- SVHC : Substance of very highly concern
- UVCB : Substance of unknown or variable composition, complex reaction products or biological materials
- vPvB : Very persistant and very bioaccumulative

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of PLASTICA'S limited knowledge and belief, accurate, and reliable as of the date of authorisation of this safety data sheet. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to be satisfied as to the suitability and completeness of such information for the product as used.