

MATERIAL SAFETY DATA SHEET

G418 Disulfate Salt

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers :

Product name : G418 Disodium Salt

Product number : 0108321422

Brand : Discovery

Reach 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 registration or the registration is envisaged for a later Registration deadline.

Cas No. : 108321-42-2

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

Identified uses : laboratory chemicals, manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Discovery Fine Chemicals Ltd
Unit 4A, Old Forge Road, Ferndown Ind. Estate,
Wimborne, Dorset, BH21 7RR.
United Kingdom

Telephone: +44 (0)1202 874517

Fax: +44 (0)845 0944 385

E-mail: discovery@discofinechem.com

1.4 Emergency telephone : +44 (0)7912 646956

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

H317 Respiratory sensitization (Category 1),

H334 Skin sensitization (Category 1)

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Pictogram



Signal Word: Danger

Hazard statement(s)

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statement(s)

P261 Avoid breathing dust.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves.

P284 Wear respiratory protection

P302+P352 IF ON SKIN: Wash with water

P333+P313 If skin irritation or rash occurs, get medical attention

2.3 Other hazards

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.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula: C₂₀H₄₀N₄O₁₀ · 2H₂SO₄
Molecular Weight: 692.71 g/mol
Cas No: 108321-42-2
E.C. No: 600-864-4

Component	Classification	Concentration
G418	Resp. sens 1; Skin sens. 1	<=100%
CAS-No. 108321-42-2	H317,H334	
E.C. No: 600-864-4		

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance.

If inhaled - If breathed in, move person into fresh air. Consult a physician.

In case of skin contact – Remove all contaminated clothing. Rinse skin with water. Consult a physician.

In case of eye contact – Flush eyes with water. Remove contact lenses. Call an ophthalmologist.

If swallowed – Make victim drink water (two glasses at most) and consult a doctor

4.2 Most important symptoms and effects, both acute and delayed – the most important known symptoms and effects are described in the labelling (see section 2.2 and/or in section 11).

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media – use water, foam, carbon dioxide (CO₂), dry powder

Unsuitable extinguishing media – for this substance no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides, sulphur oxides, sodium oxides, combustible, hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters – stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance.

5.4 Further information – Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area. For personal protection see section 8.

6.2 Environmental precautions - Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up – pick up and arrange disposal without creating dust. Sweep and shovel up. Keep in suitable closed containers for disposal.

6.4 Reference to other sections - For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Immediately change contaminated clothing, apply preventative skin protection. Wash hands and face after working with substance.

For precautions see section 2.2

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2-8°C.

Storage class (TRGS 510): 11: Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min Material tested:KCL 741 Dermatril® L

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

Body Protection - protective clothing

Respiratory protection required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P2.

The entrepreneur must ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures must be properly documented.

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) Appearance - Form: powder, white
- b) Odour - no data available
- c) Odour Threshold - no data available
- d) Melting point/range: - no data available
- e) Initial boiling point and boiling range - no data available
- f) Flammability (solid, gas) - no data available
- g) Upper/lower flammability or explosive limits - no data available
- h) Flash point – not applicable
- i) Autoignition temperature - no data available
- j) Decomposition temperature - no data available
- k) pH - no data available
- l) Viscosity – viscosity,kinematic: no data available
- viscosity dynamic: no data available
- m) Water solubility – no data available
- n) Partition coefficient: no data available .
- o) Vapour pressure - no data available
- p) Density - no data available
Relative density – no data available
- q) Relative vapour density - no data available
- r) Particle characteristics - no data available
- s) Explosive properties – no data available
- t) Oxidizing properties - no data available

9.2 Other safety information - no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

In correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

The product is chemically stable under room temperature.

10.3 Possibility of hazardous reactions

Violent reactions possible with strong oxidising agents

10.4 Conditions to avoid

Exposure to moisture.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

In the event of fire see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 oral- Rat - > 5,000 mg/kg

Remarks: (RTECS)

Inhalation – no data available

Dermal – no data available

Skin corrosion/irritation - no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

Endocrine disrupting properties

Product

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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

After uptake of large quantities: Vertigo, nausea, vomiting, ataxia.

Physiologically highly active substance. Other dangerous properties can not be excluded.

Liver – irregularities based on human evidence.

12. ECOLOGICAL INFORMATION

12.1 Toxicity - no data available

12.2 Persistence and degradability - no data available

12.3 Bio-accumulative potential - no data available

12.4 Mobility in soil - no data available

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Product

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself according to notice directive on waste 2008/98/EC.

14. TRANSPORT INFORMATION

14.1 UN number NONE

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - none

14.4 Packaging group

ADR/RID: - none

14.5 Environmental hazards

ADR/RID: no IMDG Marine Pollutant: no IATA: no

14.6 Special precautions for user

No data available

Further Information

Not classified as dangerous in the meaning of transport regulations

15. REGULATORY INFORMATION

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Other regulations

Take note of DIR 94/33/EC on the protection of young people at work

15.2 Chemical Safety Assessment –

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

Hazard statement(s)

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Precautionary statement(s)

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Further information

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product.

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APPENDIX

ABBREVIATIONS FULL TEXT

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
ALARP As low as is reasonably practicable
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging Regulations
COSHH Control of Substances Hazardous to Health EC Number European Community Number
EC50 Effective Concentration 50%
ECHA European Chemicals Agency
ELINCS European List of Notified Chemical Substances
EINECS European Inventory of Existing Commercial Chemical Substances GHS Globally Harmonised System HSE
Health & Safety Executive UK
IATA International Air Transport Association
IM Intramuscular
IMDG The International Maritime Dangerous Goods Code
IP Intraperitoneal
IV Intravascular
LD50 Lethal Dose 50%
LOEC Lowest Observable Effective Concentration
LTEL Long Term Exposure Limit
NOEC No Observable Effective Concentration
OECD Organisation for Economic Cooperations and Development
OSHA European Agency for Safety and Health at work
PBT Persistent Bioaccumulative and Toxic substance
PPE Personal Protective Equipment
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals
RID Regulations Concerning the International Carriage of Dangerous Goods by Rail
SC Subcutaneous
SDS Safety Data Sheet
SIEF Substance Information Exchange Forum
STEL Short Term Exposure Limit
SVHC Substance of Very High Concern
VOC Volatile Organic Compounds
vPvB Very Persistent and Very Bioaccumulative
WEL Workplace Exposure Limits