



biOrigins
Certificate of Conformity

Description

Epsom Salts
Batch No.(s): 4503101
Best Before Date: April 2026

Certificate of Conformity

We confirm that the above product delivered to you will conform to the manufacturer's specification. Details of this can be found on the product specification sheet. Keep in cool, dry, well-ventilated area. Keep containers tightly closed. Store in correctly labelled containers.

Production process of Epsom salt

Crude salt from mine, mainly containing

- Kieserite ($\text{MgSO}_4 \cdot \text{H}_2\text{O}$)
- Potash (KCl)
- Rock salt (NaCl)

Beneficiation process

Potash

Rock salt

**Kieserite
dissolving, crystallization**

Drying

Epsom salt ($\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$)



GMO Statement

PRODUCT NAME: Epsom Salts

MADAR Corporation Limited can confirm that the above listed product is GMO Free.

02/03/2020

SAFETY DATA SHEET

MAGNESIUM SULPHATE / EPSOM SALT

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

1.1. Product identifier

Trade name Epsom Salt
Epsom Salt pure technical
Epsom Salt pure technical, fine crystalline
Epsom Salt chemically pure
Chemical name Magnesium sulfate heptahydrate
EC no 231-298-2 (anhydrate)
CAS no 34-09-8

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

1.2.1 Relevant identified uses

Use of the substance-mixture Industrial use

1.2.2 Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Company **Madar Corporation Limited**
Name Office **19 - 20 Sandleheath Industrial Estate**
address **Fordingbridge**
Postcode **SP6 1PA**
Country **01425 655 555**
Tel
Email **technical@madarcorporation.co.uk**

1.4 Emergency telephone number

Emergency Telephone

Section 2: Hazards Identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP)
P) Not classified

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)
No labelling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Important Note The information contained in this document is given in good faith and is to the best of suppliers Knowledge correct at the date of publication, but it is for the users to satisfy themselves of the suitability of the product for their purpose.

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SAFETY DATA SHEET
MAGNESIUM SULPHATE – EPSOM SALT

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Section 3: Composition/information on ingredients

3.1 Substances

| | |
|---------------|--------------------------------|
| Chemical name | Magnesium sulfate heptahydrate |
| EC no | 231-298-2 (anhydrous) |
| CAH no | 60153-09-2 |

Full text of H-statements: see section 16

3.2 Mixture

Not applicable

Section 4: First Aid Measures

4.1. Description of first aid measures

| | |
|--------------|---------------------------------------------------------------|
| Inhalation | Remove person to fresh air and keep comfortable for breathing |
| Skin contact | Wash skin with plenty of water. |
| Eye contact | Rinse eyes with water as a precaution. |
| Ingestion | Call for medical assistance if person feels unwell. |

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

No additional information available

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

Treat symptomatically

Section 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|--------------------------------|
| Suitable extinguishing media | Water spray, Dry powder, Foam. |
| Unsuitable extinguishing media | No information available. |

5.2. Special hazards arising from the substance or mixture

| | |
|--------------------------------------------------|-----------------------------|
| Hazardous decomposition products in case of fire | Toxic fumes may be released |
|--------------------------------------------------|-----------------------------|

5.3. Advice for firefighters

| | |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Protection during firefighting | Do not attempt to take action without wearing suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing |
| Other information | Do not allow run-off from fire fighting to enter drains or water courses. |

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Review date: 12/12/21

MAGNESIUM SULPHATE - EPSOM SALT

Section 6: Accidental Release Measures**6.1. Personal precautions, protective equipment and emergency procedures**

6.1.1 For Non-emergency personnel
Emergency procedures

Ventilate spillage area

6.1.2 For emergency responders
Protective equipment

Do not attempt to take action without suitable protective equipment. For further information refer to section 8, Exposure controls personal protection.

6.2 Environmental precautions

Do not discharge into drains or water courses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Methods for cleaning up the product

Other information

Dispose of materials or solid residues at an authorised site

6.4. Reference to other sections

Information for safe handling. See heading 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

Section 7: Handling and Storage**7.1. Precautions for safe handling**

Precautions for safe handling

Ensure good ventilation of the workstation. Wear personal protective equipment.

Hygiene measures

Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

Specific end use(s)

Industrial use

Section 8: Exposure controls/personal protection**8.1. Control parameters**

No additional information available

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MAGNESIUM SULPHATE - EPSOM SALT

3.2. Exposure controls

| | |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Appropriate engineering controls | Ensure adequate dilution of the work solution |
| Hand Protection | Chemical resistant PVC gloves (to European standard EN 374 or equivalent). Nitrile rubber |
| Eye protection | Safety glasses. |
| Skin and body protection | Wear suitable protective clothing |
| Respiratory protection | In case of insufficient ventilation wear suitable respiratory equipment. Dust protection: dust mask with F or type P1 |
| Environmental exposure controls | Do not discharge to the environment. |

Section 9: Physical and chemical properties9.1. Information on basic physical and chemical properties

| | |
|---------------------------------|-----------------------------------------------------------------------------------------|
| Physical state | Solid |
| Appearance | Crystalline Powder. |
| Colour | White. |
| Odour | Odourless |
| Odour Threshold | No data available |
| HL | 8 (25°C; aqueous solution) |
| Melting point | 770 °C |
| Initial boiling point and range | Not applicable. This sample decomposes before boiling point |
| Other flammability | This product is not flammable. |
| Relative density | 1.7 g/cm ³ |
| Solubility(ies) | 242 g/l water at 25°C Soluble in water. Soluble in the following materials: Alcohols |
| Explosive properties | No considered to be explosive |
| Oxidising properties | Does not meet the criteria for classification as oxidising. |

9.2. Other information

| | |
|--------------|-----------------------|
| Bulk density | 980 kg/m ³ |
|--------------|-----------------------|

Section 10: Stability and reactivity10.1. Reactivity

| | |
|------------|-----------------------------------------------------------------------------------|
| Reactivity | The product is non-reactive under normal conditions of use, storage and transport |
|------------|-----------------------------------------------------------------------------------|

10.2. Chemical stability

| | |
|-----------|-------------------------------------------------|
| Stability | Stable under the prescribed storage conditions. |
|-----------|-------------------------------------------------|

10.3. Possibility of hazardous reactions

| | |
|--------------------------------------------------|------------------------------------------------------|
| Hazardous Polymerisation Will not polymerise. | No dangerous reactions known under normal conditions |
|--------------------------------------------------|------------------------------------------------------|

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MAGNESIUM SULPHATE - EPSOM SALT

Serious acute toxicity

10.4. Conditions to avoid

Conditions to avoid

Non under recommended storage and handling conditions.

10.5. Incompatible materials

Materials to avoid

None listed

10.6. Hazardous decomposition products

Hazardous decomposition products

Under normal conditions of storage use, hazardous decomposition products should not be produced.

Section 11: Toxicological information11. Information on toxicological effects

Acute toxicity

Not classified (Based on available data, the classification criteria are not met).

LD50 oral rat

2000 mg/kg

LD50 dermal rat

2000 mg/kg

Skin corrosion/Irritation

Not classified (Based on available data, the classification criteria are not met)
pH: 8 (25 °C aqueous solution)

Germ cell mutagenicity

Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity

Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity

Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity

Not classified (Based on available data, the classification criteria are not met)
Not classified (Not specifically applicable)

Aspiration hazard

Section 12: Ecological information

Ecotoxicity

Not regarded as dangerous for the environment.

Important Note

The information contained in this document is believed to be correct at the date of publication, but it is the user's responsibility to verify the stability of the product for their purpose.

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MAGNESIUM SULPHATE - EPSOM SALT

Section 12.0.

12.1. Toxicity

LC50 fish 1 680 mg / Pimephales promelas
EC50 Daphnia 720 mg /

12.2. Persistence and degradability

Persistence and Degradability No Information required.

12.3.

Bioaccumulative potential

Log Pow Not applicable

12.4. Mobility in soil

Ecological - soil Not applicable

12.5. Results of PBT and

This substance mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects Not applicable

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of the contents container in accordance with local council's sorting rules.

Section 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

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.

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Revised: 13.12.21

MAGNESIUM SULPHATE - EPSOM SALT

Serious about Salt

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

Not Applicable.

Section 15: Regulatory information

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

EU Regulations

No Reach annex XVII restrictions

Magnesium sulphate heptahydrate is not on the REACH Candidate List

National regulations

No additional information available

15.2. ChemicalSafety Assessment

No Chemical safety assessment has been carried out.

Section 16: Other**Information General****information**

The following information is provided to conform with article 13 of the EC Directive on Packaging and Packaging Waste 94/62/EC.

- Wherever possible we use the returnable packaging and pallets. Details of these are on our Sales Contracts
- For any non-returnable packaging the cost of disposal is at our expense, but we do not have a list of reprocessors available.
- In most cases, but not all, we are able to supply products in returnable packaging but the additional cost of this will be for the customer's expense. Please ask for details with your specific requirements.
- Any products supplied in the returnable packaging is clearly marked to this effect.

Key literature references and Sources for data

European Chemicals Agency, <http://echa.europa.eu> - REACH disseminated dossier.
International Chemical Safety Card, www.ichem.org.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

16.2015

Revision

2

Important Note

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Reviewed: 13.12.21

SPECIFICATION

Magnesium Sulphate Heptahydrate (MgSO₄·7H₂O)

| | | | | |
|-----------------------------------------|-----------------------------|----------------|------------|------------|
| Nature of Product: | White crystals | | | |
| Also known as | Epsom Salt pure, technical. | | | |
| Chemical Analysis: | Wt | typical | min | max |
| Magnesium Sulphate (MgSO ₄) | % | 49.3 | 48.0 | 50.0 |
| Water (H ₂ O) | % | 50.5 | 50.0 | 52.0 |
| Sodium (Na) | mg/kg | 45 | | 120 |
| Potassium (K) | mg/kg | 800 | 100 | 3,000 |
| Calcium (Ca) | mg/kg | 20 | | 100 |
| Chloride (Cl) | mg/kg | 100 | 10 | 200 |
| H ₂ O Insolubles | mg/kg | 10 | | 100 |
| Iron (Fe) | mg/kg | 0.15 | | |
| Heavy metals (as Pb) | mg/kg | | | 5 |

| | |
|----------------------|----------------|
| Granulometry: | typical |
| <1 mm | 65.0% |
| d ₅₀ [mm] | 0.80 mm |

Physical Properties:

| | |
|---------------------|------------------------------------------------|
| Bulk density | ca. 980 kg/m ³ |
| Molecular weight | 246.47 g/mol |
| Density | 1.7 g/cm ³ |
| Solubility in water | w(MgSO ₄) = 26.3 % at 20°C (68 °F) |

Readily soluble, practically without residues. always vigorously stir the salt into water or solution.

Special characteristics:

Depending on ambient temperature and prevailing relative humidity the product is prone to absorption of water and dehydration, which can result in caking.

Packaging:

25 kg bags, 40 per pallet.

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20/09/2021



April 2022

Vegan Statement

I can confirm that magnesium sulphate / Epsom Salt is of mineral origin

I can confirm that no animal products are contained in the material nor used at the manufacturing site