



## Certificate of Conformity

### Description

Epsom Salts  
Batch No.(s): 4441308  
Best Before Date: August 2024

### 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

Revised on 10.6.2015 v2

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

### 1.1. Product identifier

|              |                       |
|--------------|-----------------------|
| Product Name | EPSOM SALT            |
| REACH reg no | 01-2119486789-11-XXXX |
| CAS-No       | 7487-88-9             |
| EC No        | 231-298-2             |

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

|                      |  |
|----------------------|--|
| Identified uses      | Industrial, professional and consumer uses. Fertilisers. Laboratory chemicals. "Leather tanning, dye, finishing, impregnation and care products". Textile dyes. Adhesives. Sealant. Paper treatment. Some grades of substance are available for feed/food use; Feed material. (# 11.2.2) |
| Uses advised against | None Known.  |

### 1.3. Details of the supplier of the safety data sheet

|                     |  |
|---------------------|--|
| Company             | MADAR Corporation Limited<br>19-20 Sandleheath Industrial Estate<br>Fordingbridge<br>SP6 1PA<br>United Kingdom |
| Tel                 | (0044) 1425 655555   |
| Email               | technical@madarcorporation.co.uk   |
| Approved Sellers    | Cosmetic Butters, Mystic Moments, New Directions, World of Moulds  |
| Emergency Telephone | 999 emergency services (UK only) 112 emergency services (Europe only)  |

## **Section 2: Hazards Identification**

### 2.1. Classification of the substance or mixture

|                       |                 |
|-----------------------|-----------------|
| <u>Classification</u> |                 |
| Physical Hazards      | Not classified. |
| Health Hazards        | Not classified. |
| Environmental Hazards | Not classified. |

## 2.2. Label elements

|                   |                   |
|-------------------|-------------------|
| EC No.            | 231-298-2         |
| Hazard statements | NC Not classified |

## 2.3. Other hazards

The substance is not classified as PBT or vPvB according to current EU criteria.

## **Section 3: Composition/information on ingredients**

### 3.1 Substances

|                      |  |
|----------------------|--|
| Product name         | EPSOM SALTS/ MAGNESIUM SULPHATE HEPTAHYDRATE |
| REACH reg no         | 01-2119486789-11-XXXX                        |
| CAS No.              | 7487-88-9                                    |
| EC No.               | 231-298-2                                    |
| Composition comments | Purity > 99%                                 |

## **Section 4: First Aid Measures**

### 4.1. Description of first aid measures

|              |   |
|--------------|---|
| Inhalation   | Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.  |
| Ingestion    | Rinse mouth thoroughly with water. Get medical attention if any discomfort continues. Do not induce vomiting.   |
| Skin contact | Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues. |
| Eye contact  | Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.                            |

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

|             |  |
|-------------|--|
| Inhalation  | Coughing.                                  |
| Ingestion   | Stomach pain. Diarrhoea. Nausea, vomiting. |
| Eye contact | Redness.                                   |

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

|                      |   |
|----------------------|---|
| Notes for the doctor | No specific recommendations. If in doubt, get medical attention promptly. |
|----------------------|---|

## **Section 5: Firefighting measures**

### **5.1. Extinguishing media**

Suitable extinguishing media                                 The product is not flammable. Water.

Unsuitable extinguishing media                                 Carbon dioxide (CO<sub>2</sub>). Halon.

### **5.2. Special hazards arising from the substance or mixture**

Specific hazards   Irritating mists or vapours. Sulphurous gases (SO<sub>x</sub>).

### **5.3. Advice for firefighters**

Special protective equipment                                 Wear positive-pressure self-contained breathing apparatus (SCBA) and  
For firefighters   appropriate protective clothing.

## **Section 6: Accidental Release Measures**

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

Personal precautions   Avoid inhalation of dust. Provide adequate ventilation.

### **6.2. Environmental precautions**

Environmental precautions   Do not discharge into drains, water courses or onto the ground.

### **6.3. Methods and material for containment and cleaning up**

Methods for cleaning up   Avoid generation and spreading of dust. Collect and place in suitable waste  
disposal containers and seal securely. Label the containers containing waste  
and contaminated materials and remove from the area as soon as possible.  
Flush contaminated area with plenty of water.

### **6.4. Reference to other sections**

Reference to other sections   Collect and dispose of spillage as indicated in section 13.

## **Section 7: Handling and Storage**

### **7.1. Precautions for safe handling**

Usage precautions   Avoid spilling. Avoid skin and eye contact. Avoid handling which leads to dust  
formation. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Usage precautions Store in tightly closed original container in a dry, cool and well-ventilated place. Keep only in the original container.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are in section 1.2.

**Section 8: Exposure controls / personal protection**

8.1. Control parameters

Ingredient Comments No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment



Appropriate Engineering controls

Provide adequate ventilation. Avoid inhalation of dust. Observe any occupational exposure limits for the product or ingredients.

Personal protection

Wear appropriate clothing to prevent reasonably probable skin contact.

Eye/face protection

Wear tight-fitting, dust-resistant, chemical splash goggles if airborne dust is generated. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Chemical resistant gloves require for prolonged or repeated contact. To protect hands from chemicals, gloves should comply with European Standard EN374.

Hygiene measures

Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat drink or smoke.

Respiratory protection

No specific recommendations. If ventilation is inadequate, suitable respiratory protection must be worn. Wear a suitable dust mask. Disposable filtering half mask respirators should comply with European Standard EN149 or EN405.



## **Section 9: Physical and chemical properties**

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

|                                 |   |
|---------------------------------|---|
| Appearance                      | Powder.   |
| Colour                          | White.  |
| Odour                           | Odourless.  |
| pH                              | pH (diluted solution): 8 @ 25°C   |
| Melting point                   | 1130°C  |
| Initial boiling point and range | Not applicable. The sample decomposes before boiling point.                             |
| Other flammability              | This product is not flammable.  |
| Relative density                | 1.67 @ 20°C   |
| Solubility(ies)                 | 342 g/l water @ 20°C Soluble in water. Soluble in the following materials:<br>Alcohols. |
| Explosive properties            | No considered to be explosive.  |
| Oxidising properties            | Does not meet the criteria for classification as oxidising.                             |

### **9.2. Other information**

|                   |                |
|-------------------|----------------|
| Other information | Not available. |
| Molecular weight  | 120.4          |

## **Section 10: Stability and reactivity**

### **10.1. Reactivity**

|            |   |
|------------|---|
| Reactivity | There are no known reactivity hazards associated with this product. |
|------------|---|

### **10.2. Chemical Stability**

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

### **10.3. Possibility of hazardous reactions**

|                          |  |
|--------------------------|--|
| Hazardous Polymerisation |  |
| Will not polymerise.     |  |

### **10.4. Conditions to avoid**

|                     |  |
|---------------------|--|
| Conditions to avoid | Avoid excessive heat for prolonged periods of time. Water, moisture. |
|---------------------|--|

### **10.5. Incompatible materials**

|                    |             |
|--------------------|-------------|
| Materials to avoid | None known. |
|--------------------|-------------|





## 10.6. Hazardous decomposition products

Hazardous decomposition products

When heated, vapours/gases hazardous to health may be formed. Sulphurous gases (SO<sub>x</sub>)

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity – oral

Notes (oral LD<sub>50</sub>)

REACH dossier information. LD<sub>50</sub> > 2000 mg/kg, Oral, Rat Based on available data the classification criteria are not met.

Acute toxicity – dermal

Notes (dermal LD<sub>50</sub>)

REACH dossier information. LD<sub>50</sub> > 2000 mg/kg, Dermal, Rat Read-across approach: Potassium sulphate. Based on available data the classification criteria are not met.

Acute toxicity – inhalation

Notes (inhalation LC<sub>50</sub>)

Data lacking.

Skin corrosion/Irritation

Animal data

REACH dossier information. Not irritating. Read-across approach: Potassium sulphate. Based on available data the classification criteria are not met.

Serious eye damage/irritation

REACH dossier information. Not irritating. Read-across approach: Potassium sulphate. Based on available data the classification criteria are not met.

Skin sensitisation

REACH dossier information. Local Lymph Node Assay (LLNA) – Mouse: Not sensitising. Based on available data the classification criteria are not met.

Germ cell mutagenicity

REACH dossier information. Gene mutation: Negative. Based on available data the classification criteria are not met.

Carcinogenicity

Data lacking.

Reproductive toxicity

Reproductive toxicity – fertility

REACH dossier information. No evidence of reproductive toxicity in animal studies. Read-across approach: Potassium sulphate. Based on available data the classification criteria are not met.

Specific target organ toxicity – repeated exposure.

STOT – repeated exposure

REACH dossier information. Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Not relevant.

Inhalation

Dust in high concentrations may irritate the respiratory system.



|              |  |
|--------------|--|
| Ingestion    | No specific health hazards known.                        |
| Skin contact | Powder may irritate skin.                                |
| Eye contact  | Particles in the eyes may cause irritation and smarting. |

## **Section 12: Ecological information**

|             |  |
|-------------|--|
| Ecotoxicity | Not regarded as dangerous for the environment. |
|-------------|--|

### 12.1. Toxicity

|                       |  |
|-----------------------|--|
| Acute toxicity – fish | REACH dossier information<br>LC <sub>50</sub> , 96 hour: 680 mg/l, Pimephales promelas (fat-head Minnow)<br>Read-across approach: Potassium sulphate. Based on available data the classification criteria are not met. |
|-----------------------|--|

|   |  |
|---|--|
| Acute toxicity – aquatic<br>Invertebrates | REACH dossier information.<br>EC <sub>50</sub> , 48 hours; 720 mg/l, Daphnia magna<br>Read-across approach: Potassium sulphate. Based on available data the classification criteria are not met. |
|---|--|

|                                 |   |
|---------------------------------|---|
| Acute toxicity – aquatic plants | REACH dossier information.<br>EC <sub>50</sub> , 18 day: 2700 mg/l, Chlorella vulgaris<br>Read-across approach:<br>Based on available data the classification criteria are not met. |
|---------------------------------|---|

### 12.2. Persistence and degradability

|                               |                          |
|-------------------------------|--------------------------|
| Persistence and Degradability | No Information required. |
|-------------------------------|--------------------------|

### 12.3. Bioaccumulative potential

|                           |   |
|---------------------------|---|
| Bioaccumulative potential | Bioaccumulation of this product is not expected to occur. |
|---------------------------|---|

### 12.4. Mobility in soil

|                                   |                         |
|-----------------------------------|-------------------------|
| Adsorption desorption coefficient | Substance in inorganic. |
|-----------------------------------|-------------------------|

### 12.5. Results of PBT and vPvB assessment

|                                    |  |
|------------------------------------|--|
| Results of PBT and vPvB assessment | The substance is not classified as PBT or vPvB by current EU criteria. |
|------------------------------------|--|

### 12.6. Other adverse effects

|                       |             |
|-----------------------|-------------|
| Other adverse effects | None known. |
|-----------------------|-------------|



### **Section 13: Disposal considerations**

#### **13.1. Waste treatment methods**

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### **Section 14: Transport information**

General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

#### **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**

Environmentally Hazardous Substance/Marine Pollutant

No.

#### **14.6. Special precautions for user**

Not Applicable.

#### **14.7. Transport in bulk according to Annex II of MARPOL73/78 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 Legislation**

Regulation (EC) no 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Guidance

Workplace Exposure Limits EH40.

#### **15.2. Chemical Safety Assessment**

No Chemical safety assessment has been carried out.



## **Section 16: Other Information**

|  |  |
|--|--|
| General information                            | <p>The following information is provided to conform with article 13 of the EC Directive on Packaging and Packaging Waste 94/62/EC:</p> <ul style="list-style-type: none"><li>• Wherever possible we use the returnable packaging and pallets. Details of these are on our Sales Contracts.</li><li>• For any non-returnable packaging the cost of disposal is at your expense, but we do not have a list of reprocessors available.</li><li>• 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.</li><li>• Any products supplied in the returnable packaging is clearly marked to this effect.</li></ul> |
| Key literature references and Sources for data | European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a> - REACH disseminated dossier.<br>International Chemical Safety Card, <a href="http://www.inchem.org">www.inchem.org</a> .   |
| Revision comments                              | NOTE: Lines within the margin indicate significant changes from the previous revision.   |
| Revision date                                  | 4.6.2015   |
| Revision                                       | 2  |

CAS No: 10034-99-8  
 EINECS No: 231-298-2

**Chemical Analysis:**

**Levels**

|   |                   |
|---|-------------------|
| Magnesium Sulphate (MgSO <sub>4</sub> ) | 49.0% typical     |
| Water (H <sub>2</sub> O)                | 51.0% typical     |
| Sodium (Na)                             | 100 mg/kg typical |
| Potassium (K)                           | 400 mg/kg typical |
| Calcium (Ca)                            | 100 mg/kg typical |
| Chloride (Cl)                           | 200 mg/kg typical |
| H <sub>2</sub> O Insolubles             | 20 mg/kg typical  |
| Iron (Fe)                               | 1 mg/kg typical   |
| Heavy metals (as Pb)                    | <5 mg/kg typical  |

**Granulometry:-**

|                      |               |
|----------------------|---------------|
| <1.0 mm              | 65.0% typical |
| d <sub>50</sub> [mm] | 0.80 typical  |

**Physical Properties:**

|                  |                           |
|------------------|---------------------------|
| Bulk density     | ca. 980 kg/m <sup>3</sup> |
| Angle of repose  | ca. 32                    |
| Molecular weight | 246.47 g/mol              |
| Density          | 1.7 g/cm <sup>3</sup>     |



## **Vegetarian & Vegan Suitability Statement**

PRODUCT NAME: Epsom Salt

MADAR Corporation Limited can confirm that the above listed product has not been tested in animals and does not contain dairy or any other animal product, by product or derivative and is therefore suitable for vegetarian and vegan use.

28/06/19