

## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

<b>Product name:</b>	Potters Plaster
<b>Product Name</b>	<b>P3335</b>
<b>Substance name:</b>	<b>Calcium Sulphate</b> <b>CaSO<sub>4</sub> x n H<sub>2</sub>O (n = ½)</b>
<b>EC No:</b>	231-900-3
<b>REACH No:</b>	01-2119444918-26-0167
<b>CAS No:</b>	7778-18-9

#### 1.2 Relevant identified uses of the substance and uses advised against

##### 1.2.1 Relevant identified uses:

The production of plaster moulds for the manufacture of pottery articles using ceramic casting slips.

##### 1.2.2 Uses advised against:

This material will harden and become very hot, when mixed with water. Avoid skin contact and do not attempt to make a cast enclosing any part of the body. If these instructions are not followed, severe burns could result leading to surgical removal of the affected skin or even amputation of the limb.

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

##### Supplier:

PotteryCrafts Ltd.,  
Campbell Road  
Stoke,  
Stoke-on-Trent  
Staffordshire UK.  
ST4 4ET

Tel 44(0)1782 745000  
[sales@potteryCrafts.co.uk](mailto:sales@potteryCrafts.co.uk)

#### 1.4 Emergency Telephone Number:

+ 44(0)1782 7450000 (Office Hours 08:30-16:30 Mon-Friday)

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance

##### Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]:

This substance is not classified as hazardous according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

#### 2.2 Label elements

##### Labelling according Regulation (EC) No 1272/2008 [CLP]

This substance is not labelled according to Regulation (EC) No 1272/2008 [CLP]

**2.3 Other hazards**

No special remarkable hazards.

Please observe the information given in this safety data sheet.

Adverse physicochemical effects:

No special remarkable hazards.

Adverse human health effects and symptoms:

No special remarkable hazards.

Adverse environmental effects:

No special remarkable hazards.

Other adverse effects:

Large quantities of dust may be produced during dry-state pulverization.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

**Substance name: Calcium Sulfate**

**CaSO<sub>4</sub> x n H<sub>2</sub>O (n = ½)**

**INDEX No:** Not applicable

**ID No of the C & L inventory:** Not applicable

**Authorisation No:** Not applicable

**EC No:** 231-900-3

**REACH No:** 01-2119444918-26-0167

**CAS No:** 7778-18-9

**Purity:** Approximately 97% (as Calcium Sulphate Hemihydrate)

**Synonymes:**

Gypsum; Plaster; Stucco;

**Stabilisers:** None.

**Hazard impurities:** None

**Additional information:** None

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

**General notes**

No adverse effects are expected during normal use of the substance, however if any effects do appear the following recommendations apply.

**Following inhalation:**

Following inhalation of large quantities of dust remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Following skin contact:**

If some discomfort appears immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Following eye contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

**Following ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Notes for the doctor:**

Skin – friendly neutral salt. No allergic reactions known. Soluble dust.

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

No specific symptoms or effects have been reported

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

Not applicable.

**5. FIREFIGHTING MEASURES****5.1 Extinguishing media****Suitable extinguishing media:**

Use any means suitable for extinguishing surrounding fire.

**Unsuitable extinguishing media:** None.

**5.2 Special hazards arising from the substance:** None.**5.3 Advice for fire-fighters**

Product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

**Special protective equipment for fire-fighters:** None.

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel and for emergency personnel:**

Ventilate area of leak or spill. Wear appropriate personal protective equipment.

Avoid generation of dust.

Special danger of slipping by leaking/spilling product.

**6.2 Environmental precautions:**

No special environmental measures are necessary.

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

**For containment:** All containment for dry substances suitable

**For cleaning up: Spills:** Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal

**6.4 Reference to other sections:** None.**7. HANDLING AND STORAGE****7.1 Precautions for safe handling**

**Protective measures:** No special provisions if the product is used appropriately.

**Avoid:**

Dust dispersion

Inhalation of dust/particles

Eye contact

**Measures to prevent fire:**

Product itself does not burn.

No special fire protection measures are necessary.

**Measures to prevent aerosol and dust generation:**

If technically possible use local exhaust ventilation.

**Measures required to protect the environment:**

No special provisions if the product is used appropriately

**Advice on general occupational hygiene:**

Do not to eat, drink and smoke in work areas

Wash hands after use

Remove contaminated clothing and protective equipment before entering eating areas.

**7.2 Conditions for safe storage, including any incompatibilities**

**Technical measures and storage conditions:**

**Packaging materials:**

Keep/store only in original container.

**Requirements for storage rooms and vessels:** None.

**Hints on storage assembly:**

**Storage class:**

Non-combustible solids.

**Further information on storage conditions:**

**Storage according to BREF "Emissions from Storage"**

<http://eippcb.jrc.es/reference/>

**7.3 Specific end uses:**

**Recommendations:**

**Industrial sector specific solutions:**

Worse case exposure scenarios for humans and the environment are attached in Annex I of this safety data sheet.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 Control parameters**

**Ingredient comment**

Total inhalable Dust 10mg/m<sup>3</sup> – 8hr TWA

**8.1.2. Biological limit values:** None.

**8.1.3 Appropriate engineering controls:**

Local exhaust ventilation for indoor use.

Chimney filters for industrial use

**8.2 Exposure controls**

Protective Equipment



**Appropriate engineering Controls**

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

**Eye/face protection**

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Dust-resistant, chemical splash goggles.

<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.
<b>Hygiene measures</b>	Wash hands after contact.
<b>Respiratory protection</b>	If ventilation is inadequate, suitable respiratory protection must be worn.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

**Appearance**

**Physical state:** Solid. Powder

**Colour:** Colour varies white. beige. light yellow. grey or reddish tinge or brick red.

**Odour:** neutral

**pH (20 °C):**     **in delivery state:** not applicable  
                          **in aqueous solution:** about pH 7

**Melting point/freezing point:** 1450°C

**Boiling point:** Not applicable

**Flash point:** Not applicable

**Flammability:** Not flammable

**Upper/lower flammability or explosive limits:** Not applicable

**Vapour pressure:** Not applicable

**Density (g/cm<sup>3</sup>):** 2,96 g/cm<sup>3</sup>

**Bulk density (kg/m<sup>3</sup>):** about 600-1200 kg/m<sup>3</sup>

**Water solubility (20°C in g/l):** about 2 g/l

**Partition coefficient n-Octanol/Water (log Po/w):** Product/Substance is inorganic.

**Auto ignition temperature:** Not applicable

**Decomposition Temperature (°C):**

into CaSO<sub>4</sub> x ½ H<sub>2</sub>O and H<sub>2</sub>O     **about 140°C**                     **(about 413 K)**

into CaSO<sub>4</sub> and H<sub>2</sub>O                     **about 700°C**                     **(about 973 K)**

into CaO and SO<sub>3</sub>                     **about 1000°C**                     **(about 1273 K)**

**Explosive properties:** Not explosive

**Oxidizing properties:** Not oxidizing

### 9.2 Other informations: None.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

**Materials to avoid:** No materials known.

### 10.2 Chemical stability

The substance is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

Mixing with an aqueous solution of sodium carbonate will result in the formation of carbon dioxide

### 10.4 Conditions to avoid

Avoid contamination by sulphur-reducing bacteria and water under anaerobic conditions

### 10.5 Incompatible materials

No incompatible materials known.

### 10.6 Hazardous decomposition products

**Decomposition takes place from temperatures above:** 1450°C

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Relevant hazard class	Effect dose	Species	Method	Remark
Acute oral toxicity	LD50 > 1581 mg/kg bw	Rat.	OECD 420	
Acute dermal toxicity	n/a			No dermal toxicity envisaged due to low potential for absorption
Acute inhalative toxicity	LC50 > 2.61 mg/L	Rat	OECD 403	Maximum attainable dose
Skin corrosion/irritation	n/a	Rabbit	OECD 404	Not irritating
Serious eye damage/irritation	n/a	Rabbit	OECD 405	Not irritating
Respiratory or skin sensitization	n/a	Guinea pig	OECD 406	Not a skin sensitizer
Germ cell mutagenicity	n/a	In vitro tests	OECD 471 OECD 476	Not mutagenic
		Mouse	OECD 474	Not mutagenic
Carcinogenicity	n/a			No risk of carcinogenicity posed by calcium sulphate
Reproductive toxicity	NOAEL 790 mg/kg bw	Rat	OECD 422	No signs of reproductive toxicity observed
STOT single exposure	n/a			No organ toxicity observed in acute tests
STOT repeated exposure	n/a			It is considered to classify based on RCS content . STOT RE 2 (If calcium sulfate contains crystalline silica in respirable form >1 % - < 10 %.)
Aspiration hazard	n/a			No aspiration hazard envisaged

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Aquatic toxicity	Effect dose	Exposure time	Species	Method	Evaluation	Remark
Acute fish toxicity	LC50 >79mg/L	96 h	Japanese rice fish	OECD 203	Harmless to fish up to the tested concentration.	LIMIT-test
Acute daphnia toxicity	EC50 >79 mg/L	48 h	Daphnia magna	OECD 202	Harmless to daphnia up to the tested concentration.	LIMIT-test
Acute algae toxicity	E50 > 79 mg/L	72 h	Selenastrum capricornutum	OECD 201	Harmless to algae up to the concentration tested.	LIMIT-test
Toxicity to STP microorganisms	EC 50 >790 mg/L	3 h	Activated sludge	OECD 209	Harmless to STP microorganisms	

After neutralisation, toxicity is no longer observed.

The product can hydrolyse into Calcium and Sulfate Ions.  
The stated effect can be caused partly by the decomposition products.

The ecological data were measured on the hydrolysed product.

## 12.2 Persistence and degradability

### Abiotic Degradation

#### Physical- and photo-chemical elimination:

**The product hydrolyses quickly in the presence of water to:**

Calcium and Sulfate Ions

The individual components are poorly eliminated from water.

No photo-chemical elimination.

#### Biodegradation:

The methods for determining the biological degradability are not applicable to inorganic substances.  
Inorganic product which is not eliminable from water through biological cleaning processes.

## 12.3 Bioaccumulative potential

Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

No indication to bioaccumulation potential.

The ecological data were measured on the hydrolysed product.

According to experiences this product is inert and not degradable biologically.

## 12.4 Mobility in soil

Water-soluble solid.

Natural constituent in soils.

If product enters soil, it will be mobile and may contaminate groundwater

## 12.5 Results of PBT and vPvB assessment:

This substance does not meet the criteria for classification as PBT or vPvB.

## 12.6 Other adverse effects:

According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as „dangerous for the environment“.

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment is unlikely.

The information about ecology refer to the main components.

## 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.

## 14. TRANSPORT INFORMATION

### Not classified as dangerous in terms of transport regulations

14.1 **UN-Number:** None.

14.2 **UN proper shipping name:** Not applicable.

14.3 **Transport hazard class(es):** Not applicable.

14.4 **Packaging group:** Not applicable.

14.5 **Environmental hazards:** None.

14.6 **Special precautions for user:** None.

14.7 **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable.

**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance****EU regulations**

This substance is not classified as hazardous according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

This substance is not classified as dangerous according to 67/548/EEC

**National regulations**

See EU regulations

**15.2 Chemical Safety Assessment:**

For this substance a chemical safety assessment is provided in Annex I.

**16. OTHER INFORMATION****16.1 Indication of changes**

Replaces all versions before 01.01.2011

**16.2 Relevant R- and H-phrases (number and full text):** None.**16.3 Training instructions:**

**Training instructions on health and safety issues are available on [www.eurogypsum.org](http://www.eurogypsum.org)**

- Manual handling of loads -

**16.4 Additional information:**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

**Annexe 1. Exposure Assessment for Calcium Sulfate (available on request)**