

Agricultural Gypsum



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : Agricultural Gypsum
Gypsum
CAS 7778-18-9
EC / 231-900-3
REACH number : 1-2119444918-26

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

Agricultural Gypsum is a CE fertiliser grade gypsum obtained from naturally occurring mineral. It is used in a variety of agricultural applications including as a carrier for horticultural dressings, as a mushroom composting ingredient, as a soil improver and in land reclamation after salt water flooding.

1.3. Details of the supplier of the safety data sheet

Registered company name : Saint-Gobain Formula.
Address : Bowbridge Lane - Nottinghamshire.NG24 3BZ.Newark.United Kingdom.
Telephone : +44 (0) 1636 670200. Fax : +44 (0) 1636 670229.
info@saintgobainformula.com
http://www.saintgobainformula.com
Information contact : msds-formula@saint-gobain.com

1.4. Emergency telephone number : 0344 892 0111 .

Association/Organisation : <https://www.toxbase.org>.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This substance does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This substance does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

No labelling requirements for this substance.

2.3. Other hazards

The substance does not satisfy the PBT or vPvP criteria in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Composition :

Synonyme : Gypsum

Identification	(EC) 1272/2008	Note	%
INDEX: GYPSE 2 CAS: 7778-18-9 EC: 2319003 REACH: 1-2119444918-26 SULFATE DE CALCIUM SO ₄ + 2H ₂ O		[1]	100.00 %

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

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SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.
If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

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.

In the event of swallowing :

Seek medical attention : 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

None

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

Use any means suitable for extinguishing surrounding fire.

5.2. Special hazards arising from the substance or mixture

None.

5.3. Advice for firefighters

Product itself does not burn.

Special protective equipment for fire-fighters: None.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming) : do not generate dust.

6.4. Reference to other sections

None.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the substance is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

No special provisions if the product is used appropriately.

Fire prevention :

Product itself does not burn.

Coordinate fire fighting measures to the fire surroundings.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

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Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the substance is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

To avoid the exposure to moisture

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7778-18-9	10 mg/m3	-	-	-	I

- France (INRS - ED984 :2008) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
7778-18-9	-	10	-	-	-	-

Substance (mg/m3) :

Country (dust respirable limit value 8 h / dust respirable limit value short time / dust inhalable limit value 8 h / dust inhalable limit value short time)

Austria (5/10/10/20) ; Belgium (3/-/10/-) ; Denmark (-/-/10/20) ; France (5 respirable aerosol/-/10/-) ; Germany (AGS) (3/6/10/20) ; Germany (DFG) (1,5/-/4/-) ; Hungary (6/-/10/-) ; Latvia (4/-/-/-) ; Poland (-/-/10/-) ; Spain (3/-/10/-) ; Sweden (5/-/10/-) ; Switzerland (3/-/10/-) ; USA (OSHA) (5/-/15/-) ; United Kingdom (4/-/10/-).

Remarks :

Austria : STV 15 minutes average value

France : Dust inhalable : restrictive statutory limit values.

Germany (AGS) : 15 minutes average value, insoluble particulates

Germany (DFG) : insoluble particulates

Latvia : dust containing chemicals

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Calcium sulfate (mg/m3) :

Country (limit value 8 h / limit value short time)

Austria (5 RA/10 RA) ; Belgium (10/-) ; Denmark (5/-) ; Germany (AGS) (6 RA/-) ; Germany (DFG) (4 IA et 1,5 RA/-) ; Hungary (6 RA/-) ; Latvia (6 R/-) ; Spain (10 RA/-) ; Switzerland (3 RA/-) ; USA (NIOSH) (10 PT et 5 RA/-).

RA : respirable aerosol

IA : inhalable aerosol

R : respirable

PT : total dust

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Dust mineral respirable (mg/m3) :

Country (limit value 8 h / limit value short time)

Belgium (3/-) ; Denmark (5/10).

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- Belgium (Order of 19/05/2009, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7778-18-9	10 mg/m3	-	-	-	-

- Spain (Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), Mayo 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7778-18-9	10 mg/m3	-	-	-	-

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME :	VME :	Excess	Notes
7778-18-9	-	6 mg/m3 A	-	DFG

Biological limits :

DNEL values (Derived no-effect level) :

DNEL for workers (inhalation) : Acute systemic effects : 5082 mg/m3

DNEL for workers (inhalation) : Long term systemic : 21.17 mg/m3

DNEL for general population (inhalation) : Acute systemic effects : 3811 mg/m3

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DNEL for general population (inhalation) : Long term systemic : 5.29 mg/m³

DNEL for general population (oral) : Acute systemic effects : 11.4 mg/m³

DNEL for general population (oral) : Long term systemic : 1.52 mg/m³

PNEC values (Predicted no-effect concentration) :

Aquatic : Not acutely toxic to fish, invertebrates, algae and microorganisms at the concentrations tested in the studies. Acute toxicity of calcium sulfate to fish, invertebrates, algae and microorganisms are generally greater than the highest concentrations tested and are greater than the maximum solubility of calcium sulfate in water.

Sediment : Not applicable due to ubiquitous nature of calcium and sulfate ions in the environment.

Soil : Not applicable due to ubiquitous nature of calcium and sulfate ions in the environment.

STP : 100 mg/L

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

Final use:

Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	5082 mg of substance/m ³

Workers.

Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	21.17 mg of substance/m ³

Final use:

Exposure method:	Ingestion.
Potential health effects:	Short term systemic effects.
DNEL :	11.4 mg/kg body weight/day

Man exposed via the environment.

Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	1.52 mg/kg body weight/day

Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	3811 mg of substance/m ³

Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	5.29 mg of substance/m ³

Predicted no effect concentration (PNEC):

Environmental compartment:	Waste water treatment plant.
PNEC :	100 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing dust.

Maintain the general maximum admissible concentration in the work place (refert section 8.1). In case of strong dust emission wear respiratory filters type FFP 1.

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SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state : Powder or dust.
Colour: Colour varies white. beige. light yellow. grey or reddish tinge or brick red
Odour: neutral

Important health, safety and environmental information

pH : Not relevant.
Flash point interval : Not relevant.
Vapour pressure (50°C) : Not relevant.
Density : < 1
Water solubility : Partially soluble. 2g/l

9.2. Other information

Decomposition into CaSO₄, 1/2 H₂O and H₂O about 140°C (413K).
Decomposition into CaSO₄ and H₂O about 700°C (973K).
Decomposition into CaO and SO₃ about 1000°C (1273K).

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

Materials to avoid: No materials known.

10.2. Chemical stability

This substance is stable under the recommended handling and storage conditions in section 7.

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 :
- formation of dusts

10.5. Incompatible materials

None.

10.6. Hazardous decomposition products

No dangerous products of decomposition.
Decomposition takes place from temperatures above: 1450°C

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No data available.

11.1.1. Substances

Acute toxicity :

Acute oral toxicity : Method OECD 420 with rats : LD 50 > 1581mg/kg
SULFATE DE CALCIUM SO₄ + 2H₂O (CAS: 7778-18-9)
Oral route : LD50 > 1581 mg/kg
Species : Rat
OECD Guideline 420 (Acute Oral ToxicityFixed Dose Method)

Inhalation route : LC50 > 2.61 mg/l
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/skin irritation :

SULFATE DE CALCIUM SO₄ + 2H₂O (CAS: 7778-18-9)
Corrosivity : No observed effect.
Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

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Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious damage to eyes/eye irritation :

SULFATE DE CALCIUM SO₄ + 2H₂O (CAS: 7778-18-9)

Species : Rabbit
OECD Guideline 405 (Acute Eye Irritation / Corrosion)

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Species : Rabbit
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Respiratory or skin sensitisation :

Acute inhalative toxicity : Method OECD 403 with rats : LC₅₀ > 2.61 mg/L (maximum attainable dose).

SULFATE DE CALCIUM SO₄ + 2H₂O (CAS: 7778-18-9)

Local lymph node stimulation test : Non-Sensitiser.
Species : Guinea pig
OECD Guideline 406 (Skin Sensitisation)

Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.
Species : Guinea pig
OECD Guideline 406 (Skin Sensitisation)

Buehler Test : Non-sensitiser.
Species : Guinea pig
OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity :

Germ cell mutagenicity : Method OECD 471 and OECD 476 In Vitro tests : not mutagenic.

Germ cell mutagenicity : Method OECD 474 with mice : not mutagenic.

SULFATE DE CALCIUM SO₄ + 2H₂O (CAS: 7778-18-9)

No mutagenic effect.

Mutagenesis (in vivo) : Negative.
Species : Mouse
OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Mutagenesis (in vitro) : Negative.
OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Carcinogenicity :

SULFATE DE CALCIUM SO₄ + 2H₂O (CAS: 7778-18-9)

Carcinogenicity Test : Negative.

No carcinogenic effect.

Reproductive toxicant :

Method OECD 422 with rats : NOAEL = 790 mg/kg (no signs of reproductive toxicity observed).

SULFATE DE CALCIUM SO₄ + 2H₂O (CAS: 7778-18-9)

No toxic effect for reproduction

Study on development : Species : Rat
OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

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SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

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.

Fish toxicity :	LC50 > 79 mg/l Species : Others Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 > 79 mg/l Species : Daphnia sp. Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Algae toxicity :	ECr50 > 79 mg/l Species : Scenedesmus capricornutum Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)

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.

Inorganic product which is not eliminable from water through biological cleaning processes.

12.2.1. Substances

Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.
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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.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the substance and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste codes / waste designations according to EWC

10 12 wastes from manufacture of ceramic goods, bricks, tiles and construction products

10 12 06 discarded moulds

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

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SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- Regulation EC 1272/2008 modified by regulation EC 286/2011

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the substance and not as a guarantee of the properties thereof.

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.