

GPS Safety Summary Calcium Sulphate (Gypsum)

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1. General Statement

Calcium Sulphate (Gypsum) is a white crystals or powder,odourless Solid.Non combustible substance. Slightly soluble in water. No risk of dust explosion.

2. Chemical identity

Name : Calcium Sulphate (Gypsum)

CAS number(s) :13397-24-5 EC number :231-900-3 Molecular formula :CaSO4

structure :

3. Uses and Benefits

Used in the manufacture of plaster and Portland cement; in soil treatment to neutralise alkali carbonates and to prevent loss of volatile and dissolved nitrogenous compounds; for the manufacture of Plaster of Paris. Also as a white pigment; artificial white marble; filler or glaze in paints, pharmaceuticals, paper, insecticide dusts, yeast manufacture, water treatment, polishing powders; in the manufacture of sulfuric acid, calcium carbide, ammonium sulfate and porous polymers.

4. Physical / chemical properties

Property	Value
Physical state :	Solid
Colour :	No data available
Odour :	No data available
pH:	7 Temperature:20 °C
Melting point :	1450 °C
Boiling point :	NA
Flash point :	NA
Density:	2,96 g/cm³

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Solubility in Water:	2.4 ml/l at 20 °C

5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	NA
Irritation / corrosion Skin / eye/ respiratory tract	NA
Respiratory or skin sensitisation	NA
Toxicity after repeated exposure Oral / inhalation / dermal	NA
Genotoxicity / Mutagenicity	NA
Carcinogenicity	NA
Toxicity for reproduction	NA

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	No
Fate and behavior	Result
Persistence and degradability	Not rapidly degradable
Bioaccumulative potential	No additional information available

7. Exposure

Human health

The main route of exposure for calcium sulphate (CS, as anhydrite, semi hydrate or dehydrate) is in the form of dust via the respiratory tract. Workers may be exposed during (un)loading, mixing, sampling, analysis or maintenance operations and particularly in case of batch processes. The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers. Careless handling or accidental spillage of the chemical could result in exposure to potentially hazardous levels of chemicals. Industrial workers should ensure that they follow the advice found in the extended safety data sheet (SDS).

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Environment

Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. Spillage shall be quickly collected in the event of an accidental release. More information about release measures and accidental release measures are available in the extended safety data sheet.

8. Risk Management Recommendations

Human health measures

Organizational	A basic standard of occupational hygiene is recommended. Ensure operatives are well informed of the hazards and trained to minimise exposures. Ensure regular inspection and maintenance of equipment and machines. Handle and store according to the indications of the Safety Data Sheet.	
Protection	Eye protection:	Safety glasses
	Skin and body protection:	Wear suitable protective clothing
	Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment.
Engineering controls	Ensure good ventilation of the work station.	
Environment protective measures		
Avoid release to the environment.		

9. First-aid measures

First-aid measures after inhalation: Remove the person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact: Wash skin with plenty of water.

First-aid measures after eye contact: Rinse eyes with water as a precaution.

First-aid measures after ingestion :Call a poison center or a doctor if you feel unwell.

10. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Water spray. Dry powder. Foam.

Unsuitable extinguishing media: Do not use a heavy water stream.

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Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: Toxic fumes may be released.

Advice for firefighters

Precautionary measures fire: Exposure to fire/heat: keep upwind. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions: Eliminate all ignition sources if safe to do so. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Do not enter fire area without proper protective equipment, including respiratory protection.

11. Accidental release measures

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

Environmental precautions: Avoid release to the environment.

For containment :Stop leak without risks if possible.

12. Disposal consideration

Regional legislation (waste): Disposal must be done according to official regulations.

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations: Disposal must be done according to official regulations.

13. Handling and storage

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.

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

14. Classification and Labeling

GHS US classification

Not classified

15. Conclusion

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Calcium Sulphate (Gypsum) is non-combustible. Select fire and explosion prevention measures according to the other used substances.he main route of exposure for calcium sulphate (CS, as anhydrite, semi hydrate or dehydrate) is in the form of dusts via the respiratory tract. Other routes of exposure are not expected to have any relevance at the workplace. Risk of explosion in contact with: aluminium powder / heat diazomethane (rare) The substance can react dangerously with: strong reducing agents Phosphorus / heat. Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.

16. Contact Information within company

Manufacturer

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This GPS safety summary is intended to give general information about the health, safety and environmental and not intended to provide in-depth details. To obtain the most accurate and current information, consult the appropriate Safety Data Sheet (SDS) prior to use of the material named herein.