

Calcium sulfate dihydrate pure

Revision date: 13.07.2023

Product code: 15219

according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

Calcium sulfate dihydrate pure

REACH Registration Number:	01-2119444918-26-XXXX
CAS No:	10101-41-4
EC No:	231-900-3

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

Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name:	AnalytiChem GmbH	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
E-mail:	info@analytichem.de	
Contact person:	Abteilung Produktsicherheit	Telephone:0203/5194-107/117
E-mail:	produktsicherheit@analytichem.de	
Internet:	www.analytichem.de	
Responsible Department:	Abteilung Produktsicherheit	
<u>1.4. Emergency telephone</u> number:	Exposure, or Accident Call CHEMTR	bus Goods] Incidents Spill, Leak, Fire, REC Day or Night Within USA and Canada: anada: +1 703-741-5970 (collect calls

Further Information

No data available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This substance is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula:	CaSO4 * 2H2O
Molecular weight:	172,17 g/mol



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Hazardous components

CAS No	Chemical name			Quantity	
	EC No Index No REACH No				
	Classification (Regulation (EC) No 1272/2008)				
10101-41-4	Calcium sulphate dihydrate				
	231-900-3		01-2119444918-26-XXXX		

Full text of H and EUH statements: see section 16.

Specific Con	Specific Conc. Limits, M-factors and ATE				
CAS No	EC No	Chemical name	Quantity		
	Specific Conc. Limits, M-factors and ATE				
10101-41-4	231-900-3	Calcium sulphate dihydrate	100 %		
	inhalation: LC5	0 = > 3,26 mg/l (dusts or mists); oral: LD50 = > 1581 mg/kg			

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No data available

After inhalation

Provide fresh air. Call a doctor if you feel unwell.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

Rinse mouth immediately and drink plenty of water. Call a doctor if you feel unwell.

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

No data available

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media no restriction

5.2. Special hazards arising from the substance or mixture

Non-combustible solids Hazardous combustion products In case of fire may be liberated:



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Sulphur oxides

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety. Emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

6.2. Environmental precautions

No special environmental measures are necessary.

6.3. Methods and material for containment and cleaning up

For containment

Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Collect in closed and suitable containers for disposal. Take up carefully when dry. Take up dust-free and set down dust-free.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation. Do not breathe dust/fume/gas/mist/vapours/spray. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handle and open container with care. Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Avoid dust formation. Do not breathe dust.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.



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Further information on handling

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and dry.

Hints on joint storage

No special measures are necessary.

Further information on storage conditions

storage temperature +5°C bis +30°C

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
10101-41-4	Gypsum, respirable dust	-	4		TWA (8 h)	

DNEL/DMEL values

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
10101-41-4	Calcium sulphate dihydrate					
Worker DNEL	_, long-term	inhalation	systemic	21,17 mg/m ³		
Worker DNEL, acute inhalation systemic 5082 mg/m ²				5082 mg/m ³		
Consumer DN	NEL, long-term	inhalation	systemic	5,29 mg/m³		
Consumer DNEL, acute		inhalation	systemic	3811 mg/m ³		
Consumer DNEL, long-term		oral	systemic	1,52 mg/kg bw/day		
Consumer DNEL, acute		oral	systemic	11,4 mg/kg bw/day		

PNEC values

CAS No	Substance			
Environmental	Environmental compartment Value			
10101-41-4	10101-41-4 Calcium sulphate dihydrate			
Micro-organism	Micro-organisms in sewage treatment plants (STP) 100 mg/l			

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four



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control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact Trade name/designation: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact Trade name/designation: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing. Wash hands before breaks and after work.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Filtering device with filter or ventilator filtering device of type: P1

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid	
Colour:	colourless	
Odour:	odourless	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and		not determined
boiling range:		
Flammability:		not determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		>140 °C
pH-Value (at 20 °C):		7,0 (50 g/l)
Viscosity / kinematic:		not determined
Water solubility:		2 g/L
(at 20 °C)		



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not determined

not determined

not determined

not determined

not determined

not determined 400-600 kg/m³

not determined

not determined

No data available

not determined

not applicable

not determined

100%

2,32 g/cm³

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Solubility in other solvents not determined Dissolution rate: Partition coefficient n-octanol/water: Dispersion stability: Vapour pressure: Vapour pressure: Density (at 20 °C): Relative density: Bulk density: Relative vapour density: Particle characteristics:

9.2. Other information

Information with regard to physical hazard classes Explosive properties

Dust explosibility Sustaining combustion: Self-ignition temperature Solid: Gas: Oxidizing properties Not oxidising.

Other safety characteristics

Evaporation rate: Solvent separation test: Solvent content: Solid content: Sublimation point: Softening point: Pour point: not determined: Viscosity / dynamic: Flow time:

Further Information

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No data available



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Further information

No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicocinetics, metabolism and distribution

No data available

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name							
	Exposure route	Dose	Species	Source	Method			
10101-41-4	Calcium sulphate dihydrate							
	oral	LD50 > 1581 mg/kg	Rat	Study report (2003)	OECD Guideline 420			
	inhalation (4 h) dust/mist	LC50 > 3,26 mg/l	Rat	Study report (2010)	OECD Guideline 403			

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

No data available

Specific effects in experiment on an animal

No data available

Additional information on tests

No data available

Practical experience

No data available

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

No data available

Further information

No data available

SECTION 12: Ecological information

12.1. Toxicity



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Based on available data, the classification criteria are not met.

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
10101-41-4	Calcium sulphate dihydra	Calcium sulphate dihydrate						
	Acute fish toxicity LC50 > 79 96 h Oryzias latipes Study report OECD mg/l 203							
	Acute algae toxicity	ErC50 mg/l	> 79	72 h	Pseudokirchneriella subcapitata	Study report (2003)	OECD Guideline 201	
	Acute crustacea toxicity	EC50 mg/l	> 79	48 h	Daphnia magna	Study report (2003)	OECD Guideline 202	
	Acute bacteria toxicity	(EC50 mg/l)	> 1000		activated sludge of a predominantly domestic sewag	REACh Registration Dossier	OECD Guideline 209	

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

Discharge into the environment must be avoided.

Further information

Do not empty into drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Do not empty into drains.

Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land transport (ADR/RID)

- 14.1. UN number or ID number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es):
- 14.4. Packing group:

Inland waterways transport (ADN) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u>

14.4. Packing group:

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.



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Marine transport (IMDG)		
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.	
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.	
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.	
14.4. Packing group:	No dangerous good in sense of this transport regulation.	
Air transport (ICAO-TI/IATA-DGR)		
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.	
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.	
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.	
14.4. Packing group:	No dangerous good in sense of this transport regulation.	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	No	
14.6. Special precautions for user		
No dangerous good in sense of this t	ransport regulation.	
14.7. Maritime transport in bulk according		
not applicable		
SECTION 15: Regulatory information		
15.1. Safety, health and environmental rec	ulations/legislation specific for the substance or mixture	
National regulatory information		
Water hazard class (D):	1 - slightly hazardous to water	
15.2. Chemical safety assessment		
	assessment has not been carried out.	
SECTION 16: Other information		
Changes		
This data sheet contains changes fro	om the previous version in section(s): 9,11,12.	
Abbreviations and acronyms		
	ort des marchandises dangereuses par Route	
	e International Carriage of Dangerous Goods by Road)	
IMDG: International Maritime Code for	•	
IATA: International Air Transport Ass	ociation	

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%