

1: Identification of substance / mixture

1. Product Identifier

Substance

Product Name **CALCIUM CHLORIDE ANHYDROUS**
Product Code C20010
CAS Number 10043-52-4
Other Names C20010
IUPAC
MFCD Number
EC/EINECS 233-140-8
REACH Number Index-No

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

For laboratory research use

3. Details of the supplier of the safety data sheet

Melford Laboratories Ltd
Bildeston Road, Chelsworth
Ipswich
Suffolk
IP77LE
UK



Telephone: 01449 741178
Fax: 01449 741217
Email: support@melford.co.uk

4. Emergency telephone number

+44(0)1449 741178 -

2. Hazards Identification

1. Classification of the substance or mixture

H319 Eye Irrit. 2

2. Label elements

Signal Word **Warning**



Hazard Statements

H319 Causes serious eye irritation.

Precautionary Phrases

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

3. Composition / Information on Ingredients

1. Substances

Product Name	Hazards	Concentration
CALCIUM CHLORIDE ANHYDROUS		
CAS Number: 10043-52-4 EC/EINECS: 233-140-8	H319 Eye Irrit. 2	<=100%

4. First Aid Measures

1. Description of first aid measures

<i>Skin Contact</i>	Wash immediately with plenty of soap and water. Consult a doctor.
<i>Eye Contact</i>	P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313: If eye irritation persists: Get medical advice/attention. Rinse opened eye for several minutes under running water. Ensure adequate flushing by separating the eyelids with fingers Consult a doctor.
<i>Ingestion</i>	Wash out mouth with water. Consult a doctor.
<i>Inhalation</i>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.

2. Most important symptoms and effects

The most important known symptoms and effects are described in the labelling and/or in section 11

3. Indication of any immediate medical attention

Obtain medical attention in the event of any acute or delayed symptoms

5. Firefighting measures

1. Extinguishing Media

Suitable Water spray.
Carbon dioxide.
Polymer foam.
Dry chemical powder.

Unsuitable No data available.

2. Special Hazards arising from the substance or mixture

In combustion emits toxic fumes:
Hydrogen chloride gas, Calcium oxide

3. Advice for Fire Fighters

Wear self-contained breathing apparatus.
Wear protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

1. Personal Precautions

Refer to section 8 of SDS for personal protection details.
Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

2. Environmental Precautions

Do not discharge into drains or rivers.

3. Methods & Materials

Pick up and arrange disposal without creating dust. Sweep up and shovel.
Transfer to a closable, labelled salvage container for disposal by an appropriate method.

4. Preventing the occurrence of secondary hazards.

Clean up all spills immediately. Wear suitable PPE.

7. Handling and Storage

1. Personal Precautions

Safe Handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
P264: Wash hands thoroughly after handling.

Protection against explosions and fires Normal measures for preventive fire protection.

2. Conditions for safe storage, including any incompatibilities

Managing Storage Risks Store in cool, well ventilated area.

Storage Controls Moisture sensitive

Maintaining Integrity No special requirements

Other advice No further information available.

3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

8. Exposure Controls/Personal Protection

1. Control Parameters

No Data Available

2. Exposure Controls

General protective and hygiene measures P280: Wear protective gloves/protective clothing/eye protection/face protection. The standard precautionary measures should be adhered to when handling
Wash hands during breaks and at the end of handling the material

Engineering measures Provide appropriate exhaust ventilation at places where dust is formed.

Eye / Face Protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Hand protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min

Wash and dry hands.
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it

Respiratory protection For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Skin protection Impoervious clothing.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Other personal protection advice No data available

9. Physical and Chemical Properties

1. Physical and Chemical Properties

Appearance	White crystalline solid
Odour	No Data Available
Odour threshold	No Data Available
PH	No Data Available
Melting point / Freezing point	No Data Available
Initial boiling point and boiling range	No Data Available
Flash point	No Data Available
Evaporation rate	No Data Available
Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	No Data Available
Vapour pressure	No Data Available
Vapour density	No Data Available
Relative density	No Data Available
Solubility(ies):	No Data Available
Partition coefficient: n-octanol/water	No Data Available
Auto-ignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

2. Other Information

No additional information available

10. Stability and Reactivity

1. Reactivity

No data available

2. Stability

Stable under recommended storage conditions

3. Possibility of Hazardous Reactions

No data available

4. Conditions to Avoid

Exposure to moisture may affect product quality.

5. Incompatible Materials

Strong acids, Borane/boron oxides, Zinc, Calcium oxide, Methyl vinyl ether, Calcium chloride is attacked by bromine trifluoride

6. Hazardous Decomposition Products

In combustion emits toxic fumes:
Hydrogen chloride gas, Calcium oxide

11. Toxicology information

1. Information

Acute Toxicity LD50 Oral-Rat-1000 mg/kg
LD50 Dermal-Rat-2630 mg/kg

Skin corrosion/irritation No data available

Serious eye Damage/irritation No data available

Respiratory or skin sensitisation No data available

Germ Cell mutagenicity No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity No data available

STOT-single exposure No data available

STOT-repeated exposure No data available

Aspiration hazard No data available

2. Additional

RTECS:EV9800000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological Information

1. Toxicity

Toxicity to fish

LC50 - *Lepomis macrochirus* - 10,650 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - *Daphnia magna* (Water flea) - 52 mg/l - 48 h

2. Persistence and degradability

No data available

3. Bio-Accumulative Potential

No data available

4. Mobility and Soil

No data available

5. Results of PBT & vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

6. Other adverse effects

No data available

13. Disposal Considerations

1. Waste Treatment Methods

Disposal Operations Hand over to authorised disposal company as hazardous waste.

Disposal of Packaging Disposal must be made according to official regulations.

14. Transport Information

Air (ICAO)

Not classified as hazardous for transport

Road (ADR)

Not classified as hazardous for transport

Sea (IMDG)

Not classified as hazardous for transport

15. Safety, health, environmental and national regulations

1. Safety, health, environmental and national regulations:

Product is not subject to any additional regulations or provisions.

2. Safety Assessment

No Chemical Safety Assessment

16. Other Information

1. Other Information:

This safety data sheet complies to the requirements of Regulation (EC) No. 1907/2006

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)

RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association

ICAO:International Civil Aviation Organization

ICAO-TI: Technical Instructions by the ICAO

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS:Chemical Abstracts Service

3. Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage , transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material nused in combination with any other material or in any process unless specified in the text