

## Calcium Chloride Di-Hydrate, IP, BP, EP, USP, Food Grade, Laboratory Grade

### Product Identification

Description Calcium Chloride Di-hydrate of Pharmaceutical Quality, food grade  
 Synonyms Calcium Dichloride Dihydrate  
 Chemical Formula  $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$   
 Molecular Weight approx. 146.98 g/mol  
 CAS Number 10035-04-8

HS Number 2827 2000  
 REACH Registration Not obligatory to registration acc. Directive (EU) no. 1907/2006, article 2, item 5  
 GRAS Classification Generally recognized as safe

### Product Description

Main Applications

1.) Low sodium Salt for High Blood Pressure patients. 2.) Oral Re hydration salts 3.) Water treatment 4.) Water Softening Chemicals 5.) Fish Preservation 6.) Treatment of hypokalemia 7.) treatment of Calcium deficiency for animals 8.) Fire extinguisher 9.) Glass Industry 10.) Shrimp farming or aquaculture, 11.) Osmo-regulation for fish tanks 12.) Carrageenan Mfg 13) Intravenous Infusions for humans 14.) Kidney Flush Solutions 15.) Dialysis Solutions

Mineral Content approx. 75 % Calcium Chloride  
 Characteristic White crystalline powder, odourless, Hygroscopic  
 Purity EP, USP, BP, IP, E509

Quality Standards Production certified according to Local GMP & ISO 9001:2008 & Halal Certified

Shelf Life 3 years from production date  
 Storage Conditions closed, clean, dry, at temperatures below 30 °C

Parameters	USP	BP	IP	EP
Identification	Must Shown Calcium & Chloride	It gives reactions (a) of chlorides, it gives reactions of Calcium	It gives reactions (a) of chlorides, it gives reactions (a) & (b) of Calcium & it complies with the limits of assay.	It gives reactions (a) of chlorides, it gives reactions of Calcium, it complies to limit test for assay
Appearance of Solution (10%)	Clear & Colorless	Clear and not more coloured then reference solution $Y_6$	Clear and not more coloured then reference solution $YS_6$	Clear and not more coloured then reference solution $Y_6$
pH (5% Solution)	4.5 to 9.2	----	----	----
Acidity/Alkalinity	0.2 ml of 0.01 M NaOH/HCl	NMT 0.2 ml of 0.01 M NaOH /HCl	NMT 0.2 ml of 0.01 M NaOH or NMT 0.2 ml of 0.01 M HCl	NMT 0.2 ml of 0.01 M NaOH /HCl
Substances precipitated in Ammonia (Iron, Aluminium & Phosphate)	No Turbidity or Precipitation	Max. 10 ppm (Iron)	No Turbidity or precipitation	Max. 10 ppm (Iron)
Heavy Metals	Max 0.001%	Max. 20 ppm	Max. 10 ppm	Max. 20 ppm
Magnesium & Alkali Salts	Max. 1%	Max. 0.5%	Max. 1.0 %	Max. 0.5%
Aluminium	Max. 1 µg/gm	Max. 1 ppm	---	Max. 1 ppm
Organic Volatile Impurity	Meets Requirement	---	---	---
Fluorine	Max. 40 ppm	---	---	---
Barium	Meets Requirement	Any opalescence in sample solution is not more intense than that in standard solution	Any opalescence in sample solution is not more intense than that in standard solution	Any opalescence in sample solution is not more intense than that in standard solution
Sulphate	Max. 240 ppm	Max. 300 ppm	Max. 300 ppm	Max. 300 ppm
Arsenic	Max. 2 ppm	---	Max. 3 ppm	---
Hypochlorite	Meets Requirement	---	---	---
Mercury	Max 1 ppm	---	---	---

Assay	99.0 % to 107.0 %	97%-103%	97%-103%	97%-103%
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### Nutritional Values (per 100 g)

Energy value	0 kcal
Proteins	0 g
Carbohydrates	0 g
Sugar	0 g

Fat	0 g
Saturated fatty acids	0 g
Dietary fibres	0 g
Sodium	max. 0.1 g

### Packaging

Primary Packaging

HDPE woven bags with LDPE-inliner of 25/50 kg net; 24x36 Inches (for empty bags) , 1 or 1.25 Mt Jumbo Bags

Available Transport Packaging

The bags are protected from the pallets by a cardboard layer.

Plastic Pallets

The fully stacked pallet is covered with a HDPE cover before applying shrink wrapping

Heat treated Wooden pallets

Customized packaging is available upon request.

Fumigated Pine wood pallets

Standard Labelling

### Calcium Chloride Di-hydrate Pharma/Food Grade

Packaging Material

We hereby certify that the materials used for packaging of the above mentioned product are in compliance with the article 3 of the Regulation (EC) 1935/2004.

Directive 94/62/EC

We herewith confirm that the packing materials used for packaging of the mentioned product are in compliance with the requirements of article 11, no. 1 of the Directive 94/62/EC on packaging and packaging waste.

### Further Quality Information

Allergens

The product mentioned above is in compliance with the requirements of the Directive 2000/13/EC (last amended by the Regulation (EC) 596/2009) and is free from allergens as mentioned in the Annex IIIa.

Transmissible Spongiform Encephalo-pathics (TSE/BSE)

For the production of above mentioned product only raw materials of synthetic or mineral origin are used. No materials of animal or human origin are involved in the production process. There-fore the risk of BSE/TSE contamination can be excluded. The product complies with Regulation (EC) no. 999/2001/EC (last amended by Directive 189/2011).

Genetically Modified Organisms

The product mentioned above does not contain any genetically modified organisms, is not com-posed of such organisms and is not produced from genetically modified organisms. Therefore the product is not in the scope of the Regulation (EC) no. 1829/2003 and is not subject to labelling obligation according to the Regulation (EC) no. 1830/2003.

Kosher/Halal

We hereby certify that our above mentioned product is manufactured by chemical process with mineral raw materials. The product does not contain any ingredient of animal origin, any blood or blood by-products or any alcohol. Alcohol has not been used in the manufacturing process. The equipment used for manufacturing and packaging of the above mentioned product is not used for the manufacture and packaging of products of animal origin or products containing animal or animal-derived ingredients. Halal certificate is available on request

Contaminants

We herewith confirm that the product mentioned above is free from the following contaminants:

- Mykotoxins
- Dioxins
- Pesticides
- Herbicides
- Organic volatile impurities (OVI)
- Metal Catalysts

Irradiation

The product mentioned above is not treated by ionising radiation during production, storage or distribution. A labelling referring to Directive 2000/13/EU, article 5, paragraph 3 is therefore not required.

Residual Solvents	The product does not contain residual solvents according to the requirements of the European Commission relating to the safety of food. During the production process as solvent solely water is used.
Melamine	The product mentioned above is free from melamine. There are no raw or auxiliary materials involved in the production process, which contain any melamine.
Dietary Information	The product is suitable for the following nutrition: Kosher <input type="checkbox"/> Halal <input type="checkbox"/> Vegetarian <input type="checkbox"/> Vegan <input type="checkbox"/>
Retain Samples	We confirm that retain samples of every batch of the product mentioned above are available. These samples are retained at least until expiration of their shelf lives.
Traceability	We herewith confirm to have implemented a traceability system, which makes it possible to trace and follow all batches of the mentioned product within the supply chain and which is in compliance with article 18 of the Regulation (EC) no. 178/2002.
Change Notification	We herewith confirm that we will inform our clients in written form at an early stage of any changes, which may have an influence to the quality of the product mentioned above. This includes modifications of the production site, the manufacturing process, the used raw materials or the used packaging.

### **Disclaimer**

The information provided in this document are compiled according to the best of our knowledge and with highest accuracy. They may be considered as reliable. Since they base partly on data provided by our suppliers, the correctness, topicality and completeness of the published information could not be warranted without restriction.