



## LIQUOR TREATMENTS

# CALCIUM CHLORIDE FLAKE

## TECHNICAL DATA SHEET

## Description

Calcium Chloride (Dihydrate) Flake (E509) is a salt used to increase the mineral content of brewing liquor to improve its brewing quality and produce the desired beer characteristics.

## Benefits

- Reduces the pH during mashing and wort boiling which improves enzyme activity
- Promotes the precipitation of unwanted proteins in the kettle, hop back or whirlpool
- Improves yeast health and flocculation
- Improves extract yield and fermentability
- Improves wort run-off
- Reduces beer stone build-up
- Adds chloride ions for sweetness and mouthfeel

## Principle

The objective of liquor treatment is to convert your water supply into acceptable brewing liquor. When applied correctly all the steps throughout the brewing process will be at the optimum pH.

**PRODUCT CODE**

CALCHLF

**COMMODITY CODE**

25201000

**PACKAGING (kg)**

25 kg

**STORAGE**

Keep in original container.  
Keep containers sealed when not in use.

**Location**

Store in cool conditions away from direct sunlight.

**Shelf Life**

At the recommended storage conditions, two years from date of manufacture.

## Application and Rates of Use

Calcium chloride flake is usually added to the grist prior to mashing but can be split across the mash and sparge liquor. To achieve best results, we recommend any salts dosage in excess of 75g/hL be added  $\frac{2}{3}$  with the grist and  $\frac{1}{3}$  with the sparge. This will maintain an even distribution of calcium and help maintain pH levels throughout the mash and sparge.

Calcium chloride flake should not be added to the hot liquor tank (HLT), as some constituents might remain in the hot liquor tank as opposed to being released into the grist, thus requiring the HLT to be cleaned on a regular basis.

### Rates of use:

Rates of calcium chloride flake should be determined based on the final brew-length and are dependent on the levels of calcium, sulphate and chloride present in your untreated liquor. 5 g of calcium chloride (dihydrate) flake per hL of your brew-length increases calcium levels by 13.6 ppm and increases chloride levels by 24.1 ppm. Knowing this information, you can calculate the amount of calcium chloride Flake needed to increase the relevant ions to the ideal level. Murphy and Son Ltd are more than happy to help calculate these dosage rates for you.

## Guideline for use

- Check that the product is within its shelf life before use.
- Test you water regularly to obtain ideal dosage rates for the best results.
- Read the Safety Data Sheet prior to use

## TECHNICAL SUPPORT

+44 (0) 115 978 5494 | [techsupport@murphyandson.co.uk](mailto:techsupport@murphyandson.co.uk)

### REGULATORY COMPLIANCE INFORMATION

Refer to the '**Product Specification Sheet**' or contact us on:  
+44 (0) 115 978 5494 | [compliance@murphyandson.co.uk](mailto:compliance@murphyandson.co.uk)

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