

## TECHNICAL INFORMATION SHEET: SODIUM BICARBONATE- LIQUOR TREATMENT

**PRODUCT NAME:**

Sodium Bicarbonate

E500

**PRODUCT CODE:**

SODBIC

**COMMODITY CODE:**

28363000

**PACKAGING:**

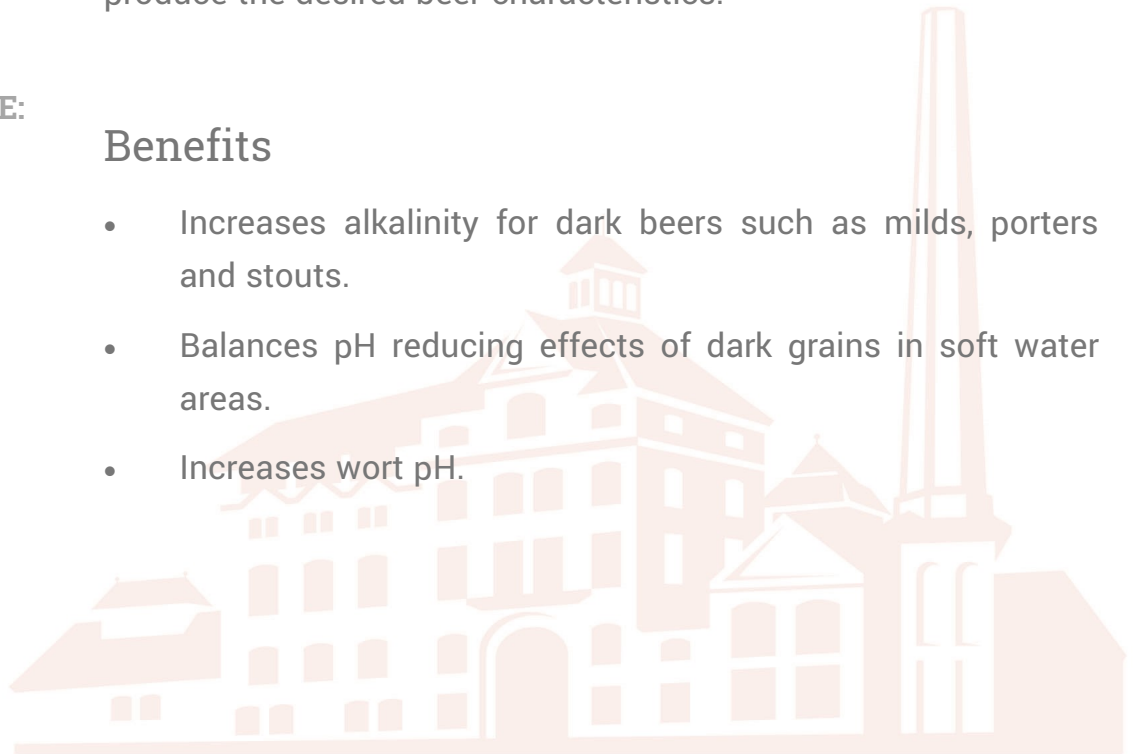
25 KG

### Description

Sodium Bicarbonate is a salt used to increase the mineral content of brewing liquor to improve its brewing quality and produce the desired beer characteristics.

### Benefits

- Increases alkalinity for dark beers such as milds, porters and stouts.
- Balances pH reducing effects of dark grains in soft water areas.
- Increases wort pH.



#### TECHNICAL SUPPORT

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#### REGULATORY COMPLIANCE INFORMATION

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

#### HEALTH & SAFETY INFORMATION

	Bitter	Strong Bitter	Lager (65°C)	Porter	Mild	Wheat	Stout
Calcium	180-220	200-220	120-140	130-160	120-140	180	120-140
Alkalinity	30-50	30-50	30-50	100	100	35	150
Chloride	150-300	200-300	Low	200-300	300	250	300
Sulphate	250-400	300-400	Low	200-300	150	220	100

TABLE 1. TYPICAL LEVELS OF IONS IN BREWING LIQUOR USED TO PRODUCE DIFFERENT TYPES OF BEER (ALL FIGURES ARE IN MILLIGRAMS PER LITRE COMMONLY KNOWN AS PPM)

## Principle

The objective of liquor treatment is to convert your water supply into acceptable brewing liquor.

Treating your brewing liquor is vitally important. When applied correctly all the steps throughout the brewing process will be at the optimum pH. If it is applied incorrectly you will get poor extract and beer that is difficult to clarify.

Sodium Bicarbonate alkalinity which is useful for dark beers such as milds, stouts and porters to balance the pH decreasing effect of dark grains without increasing the calcium content.

## Application and rates of use

Sodium Bicarbonate is normally added to the grist prior to mashing.

Sodium Bicarbonate should NOT be added to the hot liquor tank (HLT), as some constituents are insoluble. They will 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 Sodium Bicarbonate should be determined based on the final brew-length and are dependant on the levels of calcium and alkalinity in your untreated liquor.

Levels of the relevant ions present in your liquor can be obtained from your Local Water

Authority or you can send in 50ml of your raw liquor to Murphy's laboratory for a full

analysis and suggested treatment rates. Please note Local Authority reports can provide results that are not up to date and this may affect your calculations for ideal dosage rates. It is advisable to check the analysis of your water at least once a year, or on a more regular basis if the supply changes.

Once you have obtained your analysis of your raw liquor you can then calculate your dosage rates by selecting which beer type you wish to brew and refer to table 1, this will help you determine how many ions to add.

9g of Sodium Bicarbonate per hl of your brew-length increases Sodium Levels by 26 mg/litre (ppm) and increases Alkalinity by 53 mg/litre (ppm).

Knowing this information you can calculate the amount of Sodium Bicarbonate needed to increase the relevant ions to the ideal level.

Murphy and Son Ltd are more than happy to calculate these dosage rates for you.

## Guidelines 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

## Storage and Shelf life

- Store in original container
- Keep containers sealed when not in use
- The shelf life at the recommended storage conditions is 3 years.

<b>PRODUCT</b>	SODIUM BICARBONATE	<b>PRODUCT CODE</b>	SODBIC
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