Fact Sheet

AMS Alkalinity Reducing Solution

How to use this product

How much of the product to add

- Some raw liquor can have an alkalinity of up to 200 and many brewers have a target range for treated liquor of between 70 and 100.
- A suitable pH for mashing is 5.4.
- A high mash pH can result in harsh beer flavour, poor extract due to reduced ß-amylase activity, reduced protein precipitation and risk of leaching polyphenols and lipids, which will be detrimental to the beer.

The grid below shows the contribution of AMS additions to the chloride and sulphate content of the liquor and the amount of alkalinity reduction:-

AMS (ml/10L)	.6	1.5	3	4.6	6	9.2	12.2	15.3	18.4
Chloride (ppm)	**4.0**	**9.9**	**19.7**	**29.6**	**39.5**	**59.2**	**78.9**	**98.7**	**118.4**
Sulphate (ppm)	**5.4**	**13.6**	**27.2**	**40.8**	**54.4**	**81.6**	**108.8**	**136.1**	**163.3**
Alkalinity	**-11**	**-28**	**-56**	**-84**	**-112**	**-168**	**-224**	**-280**	**-337**

Where to add the product

- The product can be added to either the cold or hot liquor tank and should be thoroughly mixed.
- Time should be allowed to release the carbon dioxide produced by the neutralisation of the excess acid.

Specification

Composition	An aqueous solution of mineral acids
Appearance	Clear colourless to pale yellow liquid
Odour	Slightly acidic

Analysis

SG (@15.5^{o}C)	1.085 ± 0.01
Acidity (%) **	18.5 ± 0.9
Chloride (%) **	6.5 ± 0.3
Sulphate	9.0 ± 0.5

Maximum Limits of Impurities

As (ppm)	3
Pb (ppm)	10
Heavy Metals as Pb (ppm)	20

Regulatory Information

Classification	Irritant
Hazard Pictogram	Xi
Risk Phrases	R36/38 Irritating to eyes and skin
Safety Phrases	S24/25 Avoid contact with skin and eyes
	S26 In case of contact with eyes rinse immediately with plenty of water, seek medical advise
	S2 keep out of reach of children

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