



Muntons

PASSIONATE ABOUT MALT SINCE 1921

FAQ'S

Join the brewing

REVOLUTION⁰N

**with Muntons *new* Premium
Alcohol-Free Malt Extract**

PREMIUM ALCOHOL FREE MALT EXTRACT

Muntons Premium Alcohol Free Malt Extract (PAFME) is a modified Liquid Malt Extract that has been designed as the base liquid to produce alcohol free and low alcohol beer.

This document has some initial application ideas and our recommended usage levels.

Product details

The Product is made from brewing quality malt that is processed through Muntons brewhouse. The wort made at Muntons is not fermented but concentrated under vacuum to remove water without imparting colour the resulting malt extract is then treated with an enzyme to modify the sugar and flavour profile. PAFME is then hopped using two hop extracts that add a mild bitterness and increase the microbial stability of the product.



PRODUCT SPECIFICATION:

Colour 10% w/V: <25 EBC

Solids, Refractometric: >66%

pH: <5

IBU 10% w/V: < 15IBU

MICROBIAL SPECIFICATION:

TVCP: <5000cfu/g

Coliforms: <10cfu/g

Moulds: <100cfu/g

Yeasts: <100cfu/g



HOW can Brewer's use it?

Premium Alcohol Free Malt Extract is designed with the brewers creativity in mind. We have taken care to create a well-balanced canvas that is easy to use.

ROUTE 1:

Dilute directly into the copper. Brewer can create their recipe as they regularly would but without the requirement for yeast and fermentation and the benefit of being repeatable, fast and great tasting

ROUTE 2:

Use to dilute a finished beer down to desired ABV. Prevents the thin taste that is often associated with No/Low Beer that uses this approach



WHAT equipment do I need?

The required equipment to use this product can be found in a typical brewery. A blending vessel with a hot water connection and a mixing system. Further a storage vessel with good cooling is required and a packaging system.

The production process requires:
Dilution, heating, cooling and preferably stabilisation.

Required

- Hot Water access
- Blending Tank
- Chiller unit
- Packaging Line
- Carbonation unit



What else is good to know?

- **LOW CALORIE:** All dilutions between 12 - 20 kcal/100g
- **NO ALCOHOL CONTENT 0.0% ABV**

Shelf stable products

- Samples made with a preservative or pasteurisation step have shown to be **microbiologically stable for up to 9 - 12 months**
- Filtered beers show **no sign of colloidal instability**

Options:

- potassium sorbate at 200mg/L
- Pasteurisation bottle core of 65C for 30 min.



DILUTION AND BLENDING RECOMMENDATIONS

The dilution rate will depend on the style of beer you are making as the body, sweetness and mouthfeel will change depending on the dosing rate.

This document contains a basic dilution for a pale ale and a Lager style beer.

IPA 1HL:

7kg Premium Alcohol-Free Malt Extract
Calcium Sulphate to 200ppm
Calcium Chloride to 150ppm
Lactic acid to solution pH of 4.5

The wort is boiled for 30 mins
100g of Cascade late hops are added
100g of Simcoe added during cooling
No O₂ addition during cooling

Once the dilution is cool a hop aroma extract is added to achieve the target flavour.
We used 0.1ml/L each of Citrusy hop top notes and grapefruit flavouring

The product is then mixed with 100g of ascorbic acid and 200mg/L of Potassium sorbate.
Then the product is filtered and packed into bottles.



DILUTION AND BLENDING RECOMMENDATIONS

Lager 1HL:

4.5kg Premium Alcohol-Free Malt Extract
Calcium Sulphate to 250ppm
Calcium Chloride to 100ppm
Lactic acid to solution pH of 4.5

The wort is boiled for 30 mins
100g of Perle late hops are added
No O₂ addition during cooling

Once the dilution is cool a 0.1ml/L each of beer flavouring and 0.05ml/L of lemon flavour are added.

The product is then mixed with 100g of ascorbic acid and 200mg/L of Potassium sorbate.
Then the product is filtered and packed into bottles.



LABELLING AND DECLARATION

Muntons Premium Alcohol-Free Malt Extract declares as Hopped Barley Malt Extract.

Additional ingredients will need to be declared by weight of inclusion.

The above-mentioned IPA dilution would declare as follows:

Hopped Barley Malt Extract, Hops, Lactic Acid (Acidity Regulator), Natural Flavourings (hops, grapefruit), Preservative (potassium sorbate, ascorbic acid)

COMPOSITION DATA

Soluble extract of malted barley	66.1 - 75.6 % (Total Solids)
Water	24.5 - 33.9 %
Hop Extract	0.25 %

SHELF LIFE AND STABILITY

Muntons recommend all dilutions are blended with 1g/L of Ascorbic acid for oxidation protection and 1g/L of potassium sorbate to ensure shelf life. Once the product has been boiled and filtered the colloidal stability is good and the product stays clear.

Any dilution made without the inclusion of a preservative or pasteurisation process has a severe risk of spoilage as the product contains sugars.



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Technical support

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Are you ready to join the brewing

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