Hello

Muntons started back in 1921 and it’s fair to say a lot has changed since then. Today, we are established as a leading supplier of Malt and Malted ingredients, providing the magic inside the very best global food & drink brands.
From our high-quality British malt, we make a wide range of ingredients.
That serve brewing, distilling and food customers across continents, countries and industries.
Our innovation centres enable us to support customers and develop proactive innovation that supports our industries.

- Expertise
- New Product Development
- Innovation
- Market trends
- Product reviews
Our innovation mindset isn’t just restricted to our ingredients

Our Malt is 100% sustainable.

The Only Maltster to have set science-based targets to reduce greenhouse gas emissions by 45% (2010-2025)

2-5% of our profits are invested back into sustainability projects

Our energy is green, through our AD plant we produce green electricity for use on site and reduce our emissions by the equivalent of 2850 family cars a year.

First Maltster to commit to the Food Waste Reduction Roadmap

We don’t waste anything. 99% of our waste is recycled.

Hand on heart, we are one of the Greenest maltsters.

And we can prove it too.
Join the brewing revolution with Muntons new Premium Alcohol-Free Malt Extract
A VERSATILE BASE from which you can create a wide range of GREAT TASTING alcohol free beers.
The rise of the ‘SOBER CURIOUS’

• Sobriety is becoming a more popular lifestyle choice
• Adults aged 18-34 are most likely to drink No/Lo beer, and this will carry into their later years
• The rate of innovation in the Alcohol Free space is rapidly increasing, across all regions

“With the rise of low and no alcohol beer, the challenge brewers are facing is how to create the flavour profile of a true beer”

Source: INNOVA MARKET INSIGHTS | Sober Millennials Present New Opportunities for the Beverage Industry | April 2019
Sales are **SIGNIFICANT** and **RAPIDLY GROWING**

Non/low alcohol beer market now valued at over US$15.9 billion

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Source: Innova Market Insights – Food Metrix

Note: Value data are available for 30 global markets

Volume data are available for 22 global markets
WHAT is it?

MUNTONS PREMIUM ALCOHOL FREE MALT EXTRACT is made from Pale Brewing Malt and hops, modified using our proprietary process to give **BODY, MOUTHFEEL & FERMENTED FLAVOURS**.

It makes achieving great tasting zero alcohol beers easy.
HOW is it made?

To our high quality 100% British barley pale malt extract we add a blend of hops to give a mild bitterness and improve the foam stability of the product.

Using our signature process of heating and modifying wort sugars, we create a low sweetness product with a mild fermentation aroma & taste.

The ingredients declaration is simply Hopped Barley Malt Extract (Barley, Hop Extract)
**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:**
Use in place of brewing malt, straight dilution 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 watery diluted taste that is often associated with No/Low Beer that uses this approach.
What equipment do I need?

The required equipment is 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
It also works great for Malt Based BEVERAGES

- Simplicity of use
- Quick
- Adds depth of flavour
- Blends well with fruit flavours
- Reduced sweetness and reduced sugars
- Plant based
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

**Great solubility and handling**

• The reduced solids of the extract (vs traditional malt extract) make the addition and handling easier than ever

**Available in 25kg jerry can or 1 tonne IBC**
Technical Product Details

Premium Alcohol Free Malt Extract declares as hopped barley malt extract in all applications that are classed as alcohol free products.

The typical nutritional composition is:

- Energy: 250 kcal/100g
- Protein: 4 g/100g
- Carbohydrate: 58.9 g/100g
- Sugar: 46 g/100g
- Sodium: 12 mg/100g
- Fat: 0.2 g/100g
- Dietary Fibre: <0.5 g/100g

Muntons Material Code:
- Prem. Alc. Free MX 25kg JC 86461
- Prem. Alc. Free MX 1000kg IBC 86462

Description: Enzymically Modified and Hopped Liquid Malt Extract

Appearance: Brown slightly viscous syrup
Odour: Sweet, Mildly Acidic, Resinous
Taste: Sweet, Mild Malt Flavour, Bitter, Astringent, Mild Acidity

Ingredient Declaration: Barley Malt, Hop Extract

Allergen Information: Contains Gluten

Syrup Composition: Soluble extract of malted Barley, Water, Hop Extracts

Suggested Ingredient Declaration for Retail Product Labelling:
Hopped Barley Malt Extract (Barley, Hop Extract)

Analytical Specification (IOB Methodology):
- Colour @10% w/v < 25 EBC
- pH < 5.5
- IBU – 10% w/v < 15
- Refractometric Solids 66 - 70
- Microbiological Specification
  - Total Plate CFU/g < 5000
  - Moulds CFU/g < 100
  - Yeasts CFU/g < 100
  - Coliforms CFU/g < 10
Usage Rates (Route 1)

The Extract is designed to make a base for Alcohol free beers and beverages with good body and mouthfeel.

The usage rate varies depending on the style of beverage made:

- Lager Style: 3.5 – 5 KG / HL
- Ale Style: 4 – 6 KG / HL
- Stout Style: 4 – 8 KG / HL
- IPA Style: 5 – 7 KG / HL
- Malt Beverage Style: 3 – 9 KG / HL
- Soft Drink Style: 2.5 – 5 KG / HL
Applications

Recipe Suggestions

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% IPA</td>
<td>10HL</td>
</tr>
<tr>
<td>Premium Alcohol Free Extract</td>
<td>50KG</td>
</tr>
<tr>
<td>Cascade Hops</td>
<td>3KG</td>
</tr>
<tr>
<td>Citra Hops</td>
<td>5KG</td>
</tr>
<tr>
<td>Ascorbic acid</td>
<td>1KG</td>
</tr>
<tr>
<td>Potassium Sorbate</td>
<td>200mg/L</td>
</tr>
<tr>
<td>Simcoe Hops</td>
<td>8KG</td>
</tr>
<tr>
<td>Brewing Water</td>
<td>10HL</td>
</tr>
</tbody>
</table>

- Alkalinity: 40ppm
- Calcium chloride: 150ppm
- Calcium Sulphate: 200ppm

Extract is diluted into 10HL of water and mixed with ascorbic acid.

Mixture is then boiled. Once the product reaches a rolling boil add the Cascade hops.

Continue to boil the product for 30 minutes.

After 30 minutes the heat is turned off and the Citra hops is added.

After 20min of contact the wort is chilled and moved to a sterile vessel.

The Simcoe and potassium sorbate are added for 12 -72h at 5-10C.

Then the product is filtered and packaged.
Recipe Suggestions

0.5% Lager  10HL
Premium Alcohol Free Extract  50KG
Hallertau Mittelfruh Hops  2KG
Saaz Hops  3KG
Ascorbic acid  1KG
Potassium Sorbate  200mg/L
Beer/Yeast Flavoring  0.05KG
Brewing Water  10HL
  • Alkalinity  40ppm
  • Calcium chloride  100ppm
  • Calicum Sulphate  250ppm

Extract is diluted into 10HL of water and mixed with ascorbic acid. This mixture is then boiled. Once the product reaches a rolling boil add the HMF hops.

Continue to boil the product for 30 minutes.

After 30 minutes the heat is turned off and the Saaz hops is added.

After 20min of contact the wort is chilled and moved to a sterile vessel.

The potassium sorbate is added and the dilution is set to 5-10C.

The product is then blended 9:1 with a 5% ABV beer, the product is then immediately filtered and packaged.
**Applications**

**Recipe Suggestions**

**Water Melon Carbonated Soft Drink**

- Premium Malt Beverage Base 80KG
- Ascorbic acid 1.5KG
- Potassium Sorbate 200mg/L
- Watermelon Flavoring 0.05KG
- Strawberry Flavouring 0.025KG
- Citric Acid 2.5KG
- Potable Water 10HL

Extract is diluted into 10HL of water and mixed with ascorbic acid, watermelon flavouring, citric acid and potassium sorbate.

The mixture is then filtered and carbonated.
Meet The Family

PREMIUM SOUR MALT EXTRACT – *Our innovative soured extract offers a simple, convenient way to introduce popular sour notes consistently, without the risk of plant contamination and is simple to replicate from batch to batch.*

PALE ALE MALT EXTRACT – *A brewing extract with enhanced levels of fermentability, ideal as a brew extender, to increase beer strength, enhance colour and help maintain yeast performance.*

WHEAT MALT EXTRACT – *Made from a blend of malted wheat and malted barley, carefully extracted to retain all of the characteristics of wheat malt, this offers an ideal way to improve head formation and retention and enhance body.*

ROASTED MALT EXTRACT – *Our roasted malt extract has strong, smoky and roasted flavours so use sparingly as even low level inclusions will bring out these distinctive flavour notes in your chosen beer style.*

ULTRA DARK MALT EXTRACT – *This brewing quality malt extract, made from selected roasted grains, introduces very intense colour with little flavour addition, ideal for colour adjustment.*
Technical support

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Media support

Media assets are available on request
- Artwork assets
- Promotional Leaflet
- Email banner
- Social media graphic
- Beer Label Designs

Join the brewing REVOLUTION with Muntons new Premium Alcohol-Free Malt Extract

A VERSATILE BASE TO ADD:
- MOUTHFEEL
- BODY
- TASTE
Are you ready to join the brewing revolution?

Q&A
**Process Flow**

1. Malt Suppliers
2. Bulk Storage
3. Mill
4. Mash Vessel (conversion process)
5. Evaporate
6. Electronic Filter (100 micron)
7. Wort Tanks
8. Mash Filter
9. Pasteurise (temp. 70°C, 20 min.) and cool (temp 55°C) (CCP)
10. Filter 280 micron (CCP)
11. Storage in Blender
12. Packing (Jerry cans)
The ingredients used in the manufacture of the above product are Kilned Malted Barley, Water and Isomerised Hop Extract and Hop Extract.

The production process involves enzymatic hot water extraction of the malted barley, followed by filtration and concentration into syrup by vacuum evaporation. The syrup is then further processed with Catalase and addition of compressed air then blended with hop extracts.

**Grist (Grain) Ratio:**
Kilned Malted Barley (*White Base Malt*) 100 %

**Composition of Final Product:**
- Soluble extract of malted barley 66.1 – 75.6 % (*Total Solids*)
- Water 24.5 – 33.9 %
- Isomerised Hop Extract 0.25 %