

CARA GOLD MALT

TASTING NOTES

RICH FRUITY AROMAS WITH AN INTENSE SWEETNESS. SUBTLE SPICY NOTES

BEER STYLES	USAGE RATE	RECIPE
<i>All beer styles (foam and mouthfeel)</i>	<i>Up to 15%</i>	<i>Crisp Golden Ale See page 112</i>

Cara Gold is the lowest colour of the crystallised malts. Cara Gold yields fruity and toffee flavour notes that are carried through to the beer.

This low malt colour produces a golden orange lager with increased body and fullness, and a softer, rounder mouthfeel with improved drinkability.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	6.5% max	6.5% max	6.5% max
EXTRACT	280 L°/kg	74.1%	74.1%
COLOUR	12-16 EBC	13-18 EBC	5-7 °L

CARA MALT

TASTING NOTES

**INTENSE CARAMEL SWEETNESS,
WITH RESIDUAL MALTINESS**

BEER STYLES	USAGE RATE	RECIPE
<i>All beer styles (foam and mouthfeel)</i>	<i>Up to 15%</i>	<i>Crisp Session Bitter See page 115</i>

Cara Malt is a very low colour Crystal Malt which has an almost completely glassy endosperm. It contains a greater degree of sweetness than Crystal Malt and the harsher nutty roasted flavours are not present.

It greatly improves body, foam retention and beer stability whilst adding little colour. It has therefore, become very popular in the production of lagers where it is used to assist in enhancing flavour and character. For this reason it has also become a common constituent in low alcohol beers.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	6.0% max	6.0% max	6.0% max
EXTRACT	277 L°/kg	73.3%	73.3%
COLOUR	23-32 EBC	25-35 EBC	10-14 °L

CRYSTAL 100 MALT

TASTING NOTES

**STRONG CARAMEL AROMAS, WITH
 DELICATE FRESH FRUIT UNDERTONES**

BEER STYLES	USAGE RATE	RECIPE
<i>Milds, bitters, best bitters</i>	<i>Up to 10%</i>	<i>Crisp Mild See website for details</i>

Crystal and Cara Malts are so named for the caramelisation and crystallization of the sugars present in the barley kernel. We take green malt from germination and by applying heat while maintaining the moisture content we are able to liquify the endosperm of the barley, transforming the starch into sugars. Heat is then applied and the caramelisation begins.

In the case of Crystal Malts, when the endosperm cools, sugar crystals are formed. When you cut across the grain the glassy sheen of crystalized sugar can be seen.

Each Crystal Malt imparts a clean, nutty, caramel-like sweetness to your beers. Extra Light Crystal gives a subtle caramel flavour.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	5.5% max	5.5% max	5.5% max
EXTRACT	271 L°/kg	71.8%	71.8%
COLOUR	90-110 EBC	99-121 EBC	38-46 °L

CRYSTAL 150 MALT

TASTING NOTES

DEEP, RICH CARAMEL FLAVOURS, WITH
SUBTLE SMOKY SPICES AFTERTASTES

BEER STYLES	USAGE RATE	RECIPE
<i>Bitters, best bitters, milds</i>	<i>Up to 10%</i>	<i>Crisp Best Bitter See page 108</i>

To make Light Crystal we increase the temperature further and the endosperm darkens and flavours develop further. Think of Crystal Malts like you would make caramel at home. With Light Crystal the crystallised sugars present imparts an intense caramel flavour. Light Crystal will also impart a reddish hue to the beer and it works very well in Bitters and Ruby beers.

The number after the word Crystal refers to the EBC colour of the malt if you mashed at 100% of the grain bill. To get a rough conversion to Lovibond, just divide by two.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	5.0% max	5.0% max	5.0% max
EXTRACT	271 L°/kg	71.8%	71.8%
COLOUR	145-165 EBC	159-181 EBC	61-69 °L

CRYSTAL 240 MALT

TASTING NOTES

INTENSE, DARK CARAMEL FLAVOUR
 NOTES, WITH MELLOW UNDERTONES OF
 SPICED COFFEE, AND DARK FRUITS

BEER STYLES	USAGE RATE	RECIPE
<i>Best bitters, milds, porters, (not stouts)</i>	<i>Up to 10%</i>	<i>Crisp Strong Mild See website for details</i>

With Medium Crystal those intense caramel flavours of thick treacle toffee are developed. To achieve these kinds of flavours the temperature is raised a further step from Light Crystal and the sugars darken further still giving the beer a deep copper hue.

Remember that Crystal Malts have no enzymes or FAN preserved so be careful with the addition rate in your mash. You want to add enough to get the depth of flavour desired, but not so much that you will have issues in fermentation due to a lack of nutrients.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	3.5% max	3.5% max	3.5% max
EXTRACT	270 L°/kg	71.5%	71.5%
COLOUR	225-265 EBC	247-291 EBC	94-110 °L

CRYSTAL 400 MALT

TASTING NOTES

WELL-ROUNDED FLAVOUR PROFILE,
 DOMINATED BY TREACLE TOFFEE AROMAS.
 AN INITIAL HIT OF ROASTED NOTES WITH
 HINTS OF DRIED FRUITS

BEER STYLES	USAGE RATE	RECIPE
<i>Ruby, porters</i>	<i>Up to 10%</i>	<i>Crisp Ruby See website for details</i>

Dark Crystal Malt has the highest degree of caramelisation. The flavours are now transformed into sultanas, raisins, plums and dark, dried fruits. By now the sugars are actually being broken down by chemical processes and so the residual sweetness that the other Crystal Malts impart are being replaced by an increase in bitter flavours.

Crystal Malt sugars are non-fermentable so add a level of dextrin sugars that are preserved through to the final beer.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	3.0% max	3.0% max	3.0% max
EXTRACT	270 L°/kg	71.5%	71.5%
COLOUR	380-435 EBC	418-478 EBC	158-181 °L

AMBER MALT

Also known as Biscuit Malt

TASTING NOTES

BOLD, MALTY BACKBONE, WITH INTENSE BISCUIT AROMAS. DRY WITH BALANCED TOAST FLAVOURS

BEER STYLES	USAGE RATE	RECIPE
<i>Old ales, mild ales, brown ales, bitters, dark ales</i>	<i>Up to 5%</i>	<i>Crisp Amber Ale See page 107</i>

This is the palest malt made using a roasting technique. After conventional kilning, the malt is dry and pale in colour hence it is known as “white malt”. It is transferred to our Speciality Malt Plant and passes through the roasting column where the flavour is transformed through the application of heat. The temperatures used through the column determine the colour and flavour of the roasted malt.

Amber Malt is typified by a dry, toasted biscuit finish and can add an amber hue to the beer.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	2.0% max	2.0% max	2.0% max
EXTRACT	275 L°/kg	72.8%	72.8%
COLOUR	55-75 EBC	61-82 EBC	23-32 °L

BLACK MALT

Also known as Patent Malt

TASTING NOTES

AN INTENSE HIT OF ROASTED NOTES,
 WITH LAYERS OF LIQUORICE, SMOKINESS
 AND NUTTINESS

BEER STYLES

Porters, stouts

USAGE RATE

Up to 3%

The darkest of our roasted malts. When you need an intensely dark colour for stouts and porters this is an excellent malt to use. Despite its reputation as a highly astringent malt, nothing could be further from the truth. This malt brings with it a roasted character with some bitterness and astringency, but also flavours of currants and berries.

This malt can also be used for the colour adjustment of pale beers either in the mash or by sprinkling on top of the mash at the sparge stage, to impart a ruby hue.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	2.0% max	2.0% max	2.0% max
EXTRACT	270 L°/kg	71.5%	71.5%
COLOUR	1000-1350 EBC	1100-1485 EBC	415-561 °L

BROWN MALT

TASTING NOTES

LIGHTLY ROASTED FLAVOUR NOTES,
 WITH MILKY COFFEE UNDERTONES,
 AND HITS OF SWEET PASTRIES

BEER STYLES

*Old ales, mild ales, brown ales,
 bitters, dark ales, porters*

USAGE RATE

Up to 5%

The next stage up from Amber Malt is our Brown Malt. The colour is produced in the same manner as Amber, but is roasted for that bit longer to give a nutty roast dryness with a light brown hue, perfect for brown ales and milds.

Remember that when assessing roasted malts, it is the resultant colour and flavour of the wort and beer that is important rather than the colour of the outer barley husk of the malt in your hand.

Different varieties of barley may give roasted malts with differing husk colour, but will produce wort with the expected colour and flavour when mashed.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	2.0% max	2.0% max	2.0% max
EXTRACT	275 L°/kg	72.8%	72.8%
COLOUR	110-135 EBC	121-148 EBC	46-56 °L

CHOCOLATE MALT

TASTING NOTES

RICH, ROASTED AROMAS. TOP NOTES OF ESPRESSO COFFEE, WITH UNDERTONES OF BLACK PEPPER AND TOASTED NUTS

BEER STYLES	USAGE RATE	RECIPE
<i>Stouts, porters, strong mild</i>	<i>Up to 5%</i>	<i>Crisp London Porter See website for details</i>

Chocolate Malt shares many of the characteristics of Black Malt, but because it is roasted for a shorter period of time and to a lower final temperature, it lacks the astringency of Black Malt.

Its main use is in darker beers that require a depth of colour to tend the eye and entice the palate. Chocolate Malt has been used in Irish stout for years and the marriage of Chocolate Malt and Roasted Barley in varying proportions can give rise to a range of flavours from sweet and mellow to acrid and bitter.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	2.0% max	2.0% max	2.0% max
EXTRACT	272 L°/kg	72.0%	72.0%
COLOUR	850-1050 EBC	935-1155 EBC	353-436 °L

LOW COLOUR CHOCOLATE MALT

TASTING NOTES

DISTINCT ROASTED AROMAS, WITH
 CREAMY COFFEE NOTES. INTENSE
 SMOOTHNESS AND ADDED BODY

BEER STYLES	USAGE RATE	RECIPE
<i>Stouts, porters, strong mild</i>	<i>Up to 5%</i>	<i>Crisp Dark Mild See website for details</i>

Another step up in colour into the chocolate range, so called because of the flavour it produces in the final beer, not due to the presence of actual chocolate.

Low Colour Chocolate Malt imparts a delicate chocolate aroma and taste much like a mellow cold brew coffee. This malt type lacks the astringency of the more darkly roasted malts.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	2.0% max	2.0% max	2.0% max
EXTRACT	272 L°/kg	72.0%	72.0%
COLOUR	400-600 EBC	440-660 EBC	166-249 °L

ROAST BARLEY

TASTING NOTES

DEEPLY ROASTED, WITH PROMINENT
 SMOKY AROMAS. SUBTLE BITTERNESS
 (AT HIGHER %)

BEER STYLES	USAGE RATE	RECIPE
<i>Stouts</i>	<i>Up to 5%</i>	<i>Crisp Irish Stout See website for details</i>

Roast Barley is our darkest grain and it is made from unmalted barley. The colour produced can be almost opaque and the flavour is similar to a dark, bitter roast coffee. In stouts a combination of Chocolate, Black Malt and Roast Barley gives excellent complexity and balance.

Remember that these dark grains will have an acidifying effect on the mash, so ensure your salts have been adjusted adequately.

TYPICAL ANALYSIS

PARAMETER	IoB	EBC	ASBC
MOISTURE	2.0% max	2.0% max	2.0% max
EXTRACT	270 L°/kg	71.5%	71.5%
COLOUR	1100-1400 EBC	1210-1539 EBC	457-581 °L