

2024- 2025



THE ULTIMATE GUIDE TO
GLADFIELD MALT

2024/2025 EDITION





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Malt alternatives

MALT I CURRENTLY USE	COLOUR (EBC)	GLADFIELD MALT EQUIVALENT	COLOUR (EBC)	SWAP RATIO (OLD : GLADFIELD)
BAIRDS		GLADFIELD MALT		
Amber Malt	100–140	Gladfield Biscuit Malt	40–80	1:1.8
Black Malt	1000–1900	Gladfield Dark Chocolate Malt	1200–1400	1:1.0
Brown Malt	100–140	Gladfield Brown Malt	150–200	1:0.8
CaraMalt	30–40	Gladfield Light Crystal Malt	40–70	1:0.7
Chocolate	1100–1300	Gladfield Dark Chocolate Malt	1200–1400	1:1.0
Medium Crystal	140–160	Gladfield Medium Crystal Malt	90–130	1:1.2
Dark Crystal	220–260	Gladfield Dark Crystal Malt	175–225	1:1.1
Roast Barley	1300–1500	Gladfield Roasted Barley	1200–1500	1:1.0
Pale Chocolate	800–1000	Gladfield Light Chocolate Malt	850–1100	1:1.0
Golden Promise	5–7	Gladfield Ale Malt	5–6	1:1.0
Marris Otter	5–7	Gladfield Ale Malt	5–6	1:1.0
Pale Ale	5–7	Gladfield American Ale Malt	4.5–5.5	1:1.0
Pale Crystal	90–110	Gladfield Medium Crystal Malt	90–130	1:1.0
Premium Pilsen	3–4	Gladfield Pilsner Malt	3.2–4	1:1.0
BARRET BURSTON		GLADFIELD MALT		
Ale Malt	5–7	Gladfield Ale Malt	5–6	1:1.0
Caramalt	45–60	Gladfield Light Crystal Malt	40–70	1:1.0
Dark Crystal	185–235	Gladfield Dark Crystal Malt	175–225	1:1.0
Dark Roast Malt	1200–1400	Gladfield Dark Chocolate Malt	1200–1400	1:1.0
Medium Crystal	135–175	Gladfield Medium Crystal Malt	90–130	1:1.3
Pale	3–4	Gladfield Pilsner Malt	3.2–4	1:1.0
Roast Barley	1200–1400	Gladfield Roasted Barley	1200–1500	1:1.0
Wheat Malt	2.9	Gladfield Wheat Malt	3.2–4.2	1:1.0
BEST MALTZ		GLADFIELD MALT		
Best Aromatic Malt	40–60	Gladfield Aurora Malt	35–60	1:1.0
Black Malt	800–1500	Gladfield Light Chocolate Malt	850–1150	1:1.0
Black Malt	800–1500	Gladfield Dark Chocolate Malt	1200–1500	1:1.0
Caramel Malt Dark	80–180	Gladfield Medium Crystal Malt	90–130	1:1.0
Caramel Malt Pils	3–7	Gladfield Gladiator Malt	5–10	1:1.0
Kolsch Malt	5–7	Gladfield Ale Malt	5–6	1:1.0
Melanoidin Malt	50–80	Gladfield Aurora Malt	35–60	1:1.3
Munich Malt	10–20	Gladfield Munich Malt	14–17	1:1.0
Vienna Malt	5–7	Gladfield Vienna Malt	6.5–8.5	1:1.0
Wheat Malt	4–5	Gladfield Wheat Malt	3.2–4.2	1:1.0

MALT I CURRENTLY USE	COLOUR (EBC)	GLADFIELD MALT EQUIVALENT	COLOUR (EBC)	SWAP RATIO (OLD : GLADFIELD)
BRIESS		GLADFIELD MALT		
2-Row Base	4	Gladfield American Ale Malt	4.5–5.5	1 : 1.0
Bonlander Munich Malt	12	Gladfield Munich Malt	14–17	1 : 1.2
Caramel Malt 10L	25	Gladfield Light Crystal Malt	40–70	1 : 0.5
Caramel Malt 120L	320	Gladfield Dark Crystal Malt	175–225	1 : 1.6
Caramel Munich 60L	158	Gladfield Medium Crystal Malt	90–130	1 : 0.8
Dark Chocolate Malt	1110	Gladfield Light Chocolate Malt	850–1100	1 : 1.1
Dark Chocolate Malt	1110	Gladfield Dark Chocolate Malt	1200–1500	1 : 0.9
Dextrin Malt		Gladfield Gladiator Malt	5–10	1 : 1.0
Extra Special Malt	343	Gladfield Shepherds Delight Malt	300–350	1 : 1.0
Midnight Wheat	1450	Gladfield Roasted Wheat Malt	450–600	1 : 3.0
Pale Ale	7.5	Gladfield Ale Malt	5–6	1 : 1.0
Red Wheat	5	Gladfield Wheat Malt	3.2–4.2	1 : 1.0
Special Roast Malt	105	Aurora (75%) + Biscuit (25%)	35–60	1 : 2.0
Victory Malt	73	Gladfield Biscuit Malt	40–80	1 : 1.0
DINGMANS		GLADFIELD MALT		
Aromatic	50	Gladfield Aurora Malt	35–60	1 : 1.0
Biscuit	60	Gladfield Biscuit Malt	40–80	1 : 1.0
Pilsen	3	Gladfield Pilsner Malt	3.2–4	1 : 1.0
Special B	396	Gladfield Dark Crystal Malt with 10% Shepherds Delight		1 : 1.8
FAWCETTS		GLADFIELD MALT		
Amber	110–140	Gladfield Biscuit Malt	40–80	1 : 1.3
Black	1200–1600	Gladfield Dark Chocolate Malt	1200–1400	1 : 1.0
Brown Malt	175–200	Gladfield Brown Malt	150–200	1 : 1.0
Caramalt	25–40	Gladfield Toffee Malt	10–20	1 : 1.8
Chocolate	1050–1200	Gladfield Light Chocolate Malt	850–1100	1 : 1.1
Dark Crystal	220–340	Gladfield Dark Crystal Malt	175–225	1 : 1.5
Golden Promise Pale Ale	4.5–6.5	Gladfield American Ale Malt	4.5–5.5	1 : 1.0
Low Colour Maris Otter	3–4.5	Gladfield American Ale Malt	4.5–5.5	1 : 1.0
Maris Otter Pale Ale	5–7	Gladfield Ale Malt	5–6	1 : 1.0
Medium Crystal	120–180	Gladfield Medium Crystal Malt	90–130	1 : 1.3
Optic / Peral Pale Ale	5–7	Gladfield Ale Malt	5–6	1 : 1.0
Pale Amber	60–90	Gladfield Biscuit Malt	40–80	1 : 1.0
Pale Chocolate	600–700	Gladfield Light Chocolate Malt	850–1100	1 : 0.7
Pale Crystal	60–90	Gladfield Light Crystal Malt	40–70	1 : 1.0
Roasted Barley	1200–1600	Gladfield Roasted Barley	1200–1500	1 : 1.0
JOE WHITE		GLADFIELD MALT		
Amber Malt	40–45	Gladfield Biscuit Malt	40–80	1 : 0.9
Choc-Chit Malt	800	Gladfield Light Chocolate Malt	850–1100	1 : 0.9
Crystal Dark	225–250	Gladfield Dark Crystal Malt	175–225	1 : 1.1
Crystal Light	135–150	Gladfield Medium Crystal Malt	90–130	1 : 1.3
Export Pilsner	3–4	Gladfield Pilsner Malt	3.2–4	1 : 1.0
Munich Light	12–20	Gladfield Munich Malt	14–17	1 : 1.0
Roasted Barley	1100–1400	Gladfield Roasted Barley	1200–1500	1 : 1.0
Roasted Malt	1200–1500	Gladfield Dark Chocolate Malt	1200–1400	1 : 1.0
Roasted Wheat	1000–1400	Gladfield Roasted Wheat	450–600	1 : 1.8
Traditional Ale	5.5–7	Gladfield Ale Malt	5–6	1 : 1.0
Vienna	6–10	Gladfield Vienna Malt	6.5–8.5	1 : 1.0
Wheat Malt	3.5	Gladfield Wheat Malt	3.2–4.2	1 : 1.0
MALTEUROP		GLADFIELD MALT		
Munich	8–12	Gladfield Munich Malt	14–17	1 : 1.0
Pale Ale	5–6	Gladfield Ale Malt	5–6	1 : 1.0
Pilsner	3–4	Gladfield Pilsner Malt	3.2–4	1 : 1.0

MALT CURRENTLY USE	COLOUR (EBC)	GLADFIELD MALT EQUIVALENT	COLOUR (EBC)	SWAP RATIO (OLD : GLADFIELD)
SIMPSONS		GLADFIELD MALT		
Amber Malt	45–60	Gladfield Biscuit Malt	40–80	1 : 1.0
Aromatic Malt	25–35	Gladfield Aurora Malt	35–60	1 : 0.8
Black Malt	1100–1600	Gladfield Dark Chocolate Malt	1200–1400	1 : 1.0
Brown Malt	400	Gladfield Brown Malt	150–200	1 : 1.8
Chocolate Malt	800–1100	Gladfield Light Chocolate Malt	850–1100	1 : 1.0
Crystal Dark	220–260	Gladfield Dark Crystal Malt	175–225	1 : 1.1
Crystal	130–160	Gladfield Medium Crystal Malt	90–130	1 : 1.4
Crystal Light	80–110	Gladfield Medium Crystal Malt	90–130	1 : 1.6
Golden Promise	4–6	Gladfield Ale Malt	5–6	1 : 1.0
Imperial Malt	20–30	Gladfield Munich Malt	14–17	1 : 1.2
Marris Otter	4–6	Gladfield Ale Malt	5–6	1 : 1.0
Roast Barley	1200–1400	Gladfield Roasted Barley	1200–1500	1 : 1.0
WEYERMANN®		GLADFIELD MALT		
Abbey Malt®	40–50	Gladfield Aurora Malt	35–60	1 : 1.1
Acidulated Malt	3–6	Gladfield Sour Grapes	3–6	1 : 1.0
Bohemian Pilsner	3–4	Gladfield Pilsner Malt	3.2–4	1 : 1.0
Caraaroma®	350–450	Gladfield Shepherds Delight Malt	300–350	1 : 1.2
Carabelge®	30–40	Gladfield Light Crystal Malt	40–70	1 : 0.8
Carabohemian®	190–210	Gladfield Dark Crystal Malt	175–225	1 : 0.8
Carafa I®	800–1000	Gladfield Light Chocolate Malt	850–1100	1 : 1.0
Carafa II®	1100–1200	Gladfield Dark Chocolate Malt	1200–1400	1 : 1.1
Carafa III®	1300–1500	Gladfield Dark Chocolate Malt	1200–1400	1 : 1.0
CaraHell®	20–30	Gladfield Toffee Malt	10–20	1 : 1.3
Caraamber®	60–80	Gladfield Light Crystal Malt	40–70	1 : 1.0
CaraMunich III®	140–160	Gladfield Dark Crystal	175–225	1 : 0.8
Carapils®	3–5	Gladfield Gladiator Malt	5–10	1 : 1.0
Carared®	40–60	Gladfield RedBack Malt	60–80	1 : 0.9
Chocolate Wheat	900–1200	Gladfield Roasted Wheat Malt	450–600	1 : 1.5
Extra Pale Premium Pilsner Malt	2.5–3	Gladfield Lager Light Malt	2.5–2.9	1 : 1.0
Melanoidin Malt	60–80	Gladfield Aurora Malt	35–60	1 : 1.8
Munich I	12–17	Gladfield Munich Malt	14–17	1 : 1.0
Pale Ale Malt	5.5–7.5	Gladfield Ale Malt	5–6	1 : 1.0
Roasted Barley	1100–1200	Gladfield Roasted Barley	1200–1500	1 : 1.1
Rye Malt	4–10	Gladfield Rye Malt	4–10	1 : 1.0
Vienna	6–9	Gladfield Vienna Malt	6.5–8.5	1 : 1.0
Wheat Malt Pale	3–5	Gladfield Wheat Malt	3.2–4.2	1 : 1.0

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The Gladfield Malt story

Born and raised in Dunsandel, Canterbury, Doug Michael is a fifth generation barley grower, and together with his wife Gabi, they are proudly raising the sixth. Gladfield Malt

started as a dream. At 21 years old Doug purchased his own farm, and after many years of working long days to grow grain for another malting company, he and Gabi, decided to start their own craft malting plant on their farm.

*“Romance gets you into bed,
passion gets you out.”*

– Doug Michael

It was almost unheard of for a smaller grain, barley and malt grower to dream of challenging the established malting giants, but in 2004, with the introduction of a modern high-tech malting facility, Gladfield Malt was born. Today, Gladfield Malt has a great team helping them to make the world's best pure malt. In addition to owning one of the most modern malt roasters in Australasia, Gladfield Malt is also home to an on-site laboratory, and a smoker to create unique malts for whisky distillers.

Today, Gladfield Malt produces 37 quality malts, along with limited release specialty malts, and a complementary range of products to help brewers brew better beer. Gladfield Malt has a proven track record of supplying malts to brewers and distillers all year round, all across the globe. To provide their unique range of malts, and to meet demand, Gladfield Malt works with over 100 other growers, all from the South Island of New Zealand. Rest assured, whenever you buy Gladfield Malt, you can expect consistent, quality ingredients that give you the best end result.



Working together

New Zealand is setting a new standard in quality, craft beer. We've always been a country of innovators and pioneers, and Gladfield Malt wants to work with you to keep this proud tradition alive.

Our range is constantly expanding as we work with you. Are you dreaming about a new flavour range, or looking for more natural ingredients to improve the colour and taste of your beer? We welcome the opportunity to work with you to customise or blend malts to meet your requirements.

With Gladfield Malt, you get online access to the technical information for your malt batch before you start brewing or distilling. We provide recipes for the home and pro brewer and tips on how to use our malts for the best results.

We have an established, robust network of stockists and distributors around the globe. Get in touch with us so we can put you on to your local distributor and stockists.

Gladfield Malt is not only your malt supplier, but your partner in crime. We're motivated by your success, and want to partner with you to see you create quality whiskies and beer that people love.

"They are our single supplier of malts and oats and a range of yeasts and we use them because their specialty malts are brilliant. Their service is fantastic too. They're really accommodating and always looking at new ways of adding value for their customers."

– Dave Dixon, Two Thumb Brewing,
Christchurch, NZ



Services

Gladfield Malt is continually looking to develop the relationships with our customers, and to help by offering services and information that can get the most out of your brewing or distilling.

GLADFIELD MALT SIEVE

Sieve test quantifies a sample of crushed malt according to particle sizes using a set of test sieves. We use a set of three sieves (#14, #30, #60) plus matching lid and bottom pan to calculate the percentage of sample retained on each sieve to check if your malt mill roller is too tight. These sieves are offered out on loan. Contact us to make a booking.

WATER TESTING KITS

Test your water before you brew or more often to keep your beers tasting the way you want it and to the style of your beer you are making. Remember 90% of your beer is water. Gladfield Malt is able to source water testing kits direct from the supplier. Please contact us for more information.

BULK MALT SOLUTIONS

Our aim is to work with you to ensure you always have ready access to a constant malt supply, so whatever happens, you won't be caught short. Because we believe in fostering partnerships with our brewers and distillers, Gladfield Malt can provide your business with two bulk malt silos.

MALT BAGS

Gladfield Malt bags are now single-lined which has reduced our plastic usage by 50%. We are always researching for more innovative solutions. If you come up with one, please don't hesitate to share it with us.



Recognising a good malt

At Gladfield Malt we use only 2-row barley varieties and our malt grains are fat and even, clean and bright. The malt is free of dust and chaff and smells sweet and fresh. It tastes good and is crunchy.

INTERPRETING THE TECHNICAL INFORMATION

Every Gladfield Malt client has access to view the Certificate of Analysis (CoA) that relates to the malt batch they have purchased. The CoA will show the malt batch's diastatic power, FAN, Kolbach Index, friability and maximum moisture content.

DIASTATIC POWER

This measures the strength of starch-reducing enzymes in base malts using the Windisch Kolbach (WK) scale.

FAN (FREE AMINO NITROGEN)

This analysis is performed on base malts. It indicates the amount of free amino groups available to the yeast during the fermentation process.

KOLBACH INDEX

The Kolbach Index measures the ratio of soluble nitrogen or protein to the total nitrogen or protein available and is a valuable tool for determining malt modification.

"We use their very high-quality malts which we use in the majority of our core beers. The product is exceptional. Really good flavour and efficiency. Their customer service is excellent and I like the fact they are a family-owned operation. We're similar in that respect."

– Jono Moscrop, Bells Beach Brewing,
Torquay, VIC



Keep an eye out for Gladfield's **LIMITED RELEASE** specialty malts. We're always thinking of new ways of roasting or kilning our malts; and these limited releases will ensure that you have something different and unique to try.

Gladfield Malt also welcome the opportunity to work with you to create a **CUSTOM MALT** to meet your requirements. Think of Gladfield Malt as your partner in crime!

FRIABILITY

This is a measure of a malt's ability to crumble when crushed. If the malt is too hard, the malt has not modified well and the fermentation process will suffer.

MAXIMUM MOISTURE

Moisture and malt do not go well together! It is important to store malts in airtight containers and be mindful of using the malt before its "best before" date.

MALT CRUSH

Our malts are both plumper and more friable. If the malt mill roller is too tight, Gladfield's malt will be more likely to shatter and create too much flour. Consequently brewers could experience stuck mashes. We recommend checking the malt crush before brewing with our malts for the first time. For the ideal malt crush look for the following:

- Husk – 20%
- Coarse Grits – 35%
- Fine Grits – 35%
- Flour – 10%

The average size of our malt is >2.8mm.

Our recommended roller mill gap measurement is 1.45mm. If you brew with Gladfield's malts you will see consistency in grain size. If you lock your mill to the optimum gap size you don't need to alter from brew to brew.



BEST BEFORE STATEMENT

All malts produced by Gladfield have a recommended 'Best Before' date printed on the bags which is 24 months from manufacture. This is the ideal time to use the malts as they are the freshest and will have the best flavour under varying storage conditions.

This is different from an expiration date in that malt would take many years to truly expire and no longer be useful in brewing.

With proper storage, malts can be used for up to 5 to 10 years in some cases without any loss in brewing quality. However, since we cannot control storage conditions for this length of time, we recommend that all malts be used as fresh as possible.

The above is also valid to ALL products that Gladfield Malt sell to the brewing and distilling industry.

"Not only do we believe their products are world-class, the attention to detail and service is second to none also. Gabi and her team are always ready to go the extra mile to make things work no matter what. Gladfield Malt continues to impress us with its knowledge, can-do attitude, and unparalleled customer service. We feel both welcome and heard at Gladfield. That sets them above and apart from the rest."

– Nick Calder, One Drop Brewing Co, Botany, NSW

MALT PROFILES

Refer inside front cover for photo reference



Gladfield

ALE MALT BASE

ALSO KNOWN AS: Pale Ale Malt

SUB MALT FOR: Maris Otter Malt

Our Ale Malt is grown from plump, low protein Autumn barley varieties and is one of our most popular base malts. Ale Malt is highly friable but the soluble nitrogen ratios are kept relatively low to enhance mouth feel and head retention when brewed. This Malt has been fully modified through a traditional long cool germination resulting in higher extract potential. This type of modification helps eliminate haze issues in the beer. The kilning regime gives a nice toasty character to the malt and makes it perfect to use to brew a traditional English style.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3.5
Extract – Fine Dry min%	79	80.5
Extract – Coarse Dry		79.5
Extract – Fine As-is		78
Extract – Coarse As-is		77
Saccharification time	10	10
Odour		normal
Wort Colour	5–6	5.7
Total Nitrogen (%)	1.35–1.65	1.5
Kolbach Index	35–41	38
pH	5.7–6	6
Diastatic Power (WK) min.	150	190
FAN (mg/l) min	120	130
Friability (min) %	85	93
Glassy Corns (max) %	2	0.5
P.U.G. (max) %	5	1.5

USE: This is a base malt with a distinctly English character, suitable for many beer styles.

RATE: Up to 100%.

AMERICAN ALE MALT BASE

Gladfield's American Ale Malt is perfect for brewers who have found that our regular Ale Malt adds too much of a malty, toasted flavour profile to certain beer styles.

This base malt has been made from plump low protein Autumn barley varieties and then subjected to our traditional long cool germination period. The grains are then kilned using a special recipe that imparts a typical Ale colour for a cleaner, less toasted flavour. When brewed, this malt produces a vibrant, clean, yet solid hop-forward malt profile and is perfect for producing American-style beers. The American Ale Malt offers the brewer scope for innovation and the ability to create beers that are full of character and sophistication.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3.5
Extract – Fine Dry min%	79	80.5
Extract – Coarse Dry		79.5
Extract – Fine As-is		78
Extract – Coarse As-is		77
Saccharification time	10	10
Odour		normal
Wort Colour	4.5–5.5	5
Total Nitrogen (%)	1.45–1.75	1.65
Kolbach Index	35–41	38
pH	5.7–6	6
Diastatic Power (WK) min.	160	200
FAN (mg/l) min	120	135
Friability (min) %	85	91
Glassy Corns (max) %	2	0.5
P.U.G. (max) %	5	1.5

USE: Base malt for use in hop-forward beers.

RATE: Up to 100%.

AURORA MALT

SUB-BASE

ALSO KNOWN AS: Honey and Melanoidin Malt

Gladfield's Aurora Malt is an aromatic malt which has been developed to produce rich bready, fruit cake aromas and imparts an orange/red colour to the brew. If you want to make that big malty, robust beer, then this is a great malt to use.

The barley has undergone a long traditional germination process followed by a carefully controlled kilning regime to create a reaction between the complex sugars and amino acids. The resulting Maillard reaction is responsible for the colour, flavour and aroma of our Aurora Malt.

This malt is ideal for brewing dark ales, Belgium styles, and high alcohol beers.

Crystal Malt will add sweetness to Aurora Malt and further enhance the bready and fruitcake aromas. RedBack and Shepherds Delight malts bring out the red colours of Aurora and also introduce complementary flavours to the finished beer.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3
Extract – Fine Dry min%	79	81
Extract – Coarse Dry		80
Extract – Fine As-is		79
Extract – Coarse As-is		78
Saccharification time	10	10
Odour		normal
Wort Colour	35–60	46
Total Nitrogen (%)	1.6–1.8	1.65
Kolbach Index	37–45	40
pH	5.1–5.8	5.9
Diastatic Power (WK) min.	150	170
FAN (mg/l) min	120	125
Friability (min) %	85	88
Glassy Corns (max) %		0.5
P.U.G. (max) %		1.0

USE: Aurora Malt adds a rich malt flavour to beers.

RATE: Up to 100%.

BIG O MALTED OATS

SUB-BASE

Big O- Malted oats are a great addition to use instead of a rolled or flaked product. Whole oats are fully modified and kilned to give a rich oat, nutty flavour.

Big O Malted Oats have a few great attributes that make a preferred product for Stouts and Hazy IPAs. They have a large, thick husk which greatly aids in sparging and run-off. They have much more flavour – kilned to enhance the nutty, oaty flavours and bring more to the table than a flaked product. They bring the same silky smoothness to a beer that a rolled oat will. Big O provides a better haze than rolled oats alone in your Hazy IPAs.

Some brewing notes: The oats and husk will absorb more water so be prepared to increase the amount of your strike water. Mix the oats with the barley during milling to help deliver an even crush.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3.20
Extract – Fine Dry min%	55–61	59.83
Extract – Coarse Dry		56.66
Extract – Fine As-is		59.10
Extract – Coarse As-is		55.97
Saccharification time		<10
Odour		normal
Wort Colour	2.1–5.0	3.30
Total Nitrogen (%)	1.7–2.0	1.9
Kolbach Index	25–30	26.00
pH	5.7–6.1	5.90
FAN (mg/l) min	80–120	100.00

USE: For making wheat beers and to add body and head retention.

RATE: Up to 20%.

BISCUIT MALT

SPECIALITY

ALSO KNOWN AS: Amber Malt

Gladfield's Biscuit Malt is made by gently roasting kilned-dried Ale Malt. Our Biscuit Malt is ideal when used in small amounts to give a dry, toasted biscuit finish to light, mild ales and bitters where brewers do not want to add much colour.

We recommend our Biscuit Malt in beer styles that call for a dry finish. ESB, Pale Ales and Mild Ales are styles that come to mind. Typical usage rates are 5–15% and are mindful that Biscuit Malt has a typical colour of 65 EBC.

EBC Test Method	Specification
Moisture (max) %	5
Extract – Fine Dry min%	74
Wort Colour	40–80
pH	5.15
Typical Colour	65

USE: Add Biscuit Malt to impart a dry toasted biscuit flavour without adding much additional colour to the final beer.

RATE: Up to 15%.

BROWN MALT

SPECIALITY

Gladfield's Brown Malt is a stronger version of our Biscuit Malt. Our Brown Malt is made from green chitted malt which imparts good amber colour build up without the astringency from husk damage. This malt gives a dry biscuit, toasted hazelnut style flavour to the beer along with nice amber colour. Brown Malt is ideal for use in Porters, Stouts, Dark Ales or Dunkels in small amounts.

EBC Test Method	Specification
Moisture (max) %	5
Extract – Fine Dry min%	74
Wort Colour	150–200
pH	4.81
Typical Colour	170

USE: Brown Malt imparts a rich dry biscuit, nutty, light roasted flavour and gives the beer a deep amber hue.

RATE: Up to 15%.

CHIT MALTS SPECIALITY

The term “chitting” in malting represents the first stage of germination, where the barley has taken up enough moisture from steeping to start the magic process of turning starch into soluble protein and sugars to feed the yeast during fermentation. Precisely how Chit Malt can improve a beer’s mouth feel and head retention results from when we kiln the malt; during the early stages of starch modification. Kilning at this point leaves long protein chains in the malt from the enzymes produced at chitting. These remain in the beer at higher levels, after fermentation.

Beers produced with Chit Malts retain this higher protein content and these proteins contribute to increased levels of foam-positive proteins and improved head retention. They can also impart added mouth feel, particularly in drier beer styles like Sours and Saisons. Chit Malt is a great alternative to using raw adjuncts. The flavour impact in a beer is minimum if used at rates between 1–4%, with subtle green, grassy, raw grain flavours developing when used in higher percentages.

CHIT BARLEY MALT

Light in colour and used up to 15% in a beer recipe. This malt is a good alternative for raw adjuncts. The flavour impact in a beer is minimum with subtle green, grassy raw grain flavour. Use up to 7% in kettle-soured beers to improve head retention and body. If used in conjunction with Big O Malated Oats, it will help improve haze stability in NEIPAs.

EBC Test Method	Specification
Moisture (max) %	10
Wort Colour	2–6
pH	5.75

USE: Achieve superior foam stability. In our opinion a must for use in Sours, Saisons, Hazy Pale Ales and low alcohol beers.

RATE: Up to 15%.

CHIT WHEAT MALT

Chit Wheat Malt offers new options for Saisons, Sours, Hazy Pale Ales, and low alcohol beers. Can add noticeable body and velvety mouth feel due to wheat’s high protein content, combined with kilning it at the chitting stage. The higher enzymatic activity can also increase mash efficiency and starch conversion rates when paired with cheaper, unmodified cereal grains.

EBC Test Method	Specification
Moisture (max) %	10
Wort Colour	2–6
pH	6.1–6.2

USE: Use alone, as a substitute for raw, flaked and rolled grains, or in conjunction with Chit Barley.

RATE: Up to 5%.

CHOCOLATE MALTS

SPECIALITY

Brewers are often wary of using Chocolate Malts because they are often associated with imparting bitter, harsh and astringent flavours. These flavours are formed when the husk is burnt during the roasting process.

At Gladfield Malt, we have perfected a unique process that keeps the husk moist during the roasting process which limits these bitter and astringent flavours from forming. Gladfield's Chocolate Malts are still darker malts, but impart smooth roast flavours to the brewed beer.

DARK CHOCOLATE MALT

Gladfield Dark Chocolate Malt is dark in colour and light on astringency due to our unique roasting technique. It has lovely coffee/chocolate aromas and is a big hit with Porter and Stout drinkers. This malt must be used fresh.

EBC Test Method	Specification
Moisture (max) %	4.5
Extract – Fine Dry min%	71
Wort Colour	1200–1400
pH	5.5–5.7
Typical Colour	1300

USE: Adds deep coffee, chocolate and dark roast flavours.

RATE: Up to 10%.

LIGHT CHOCOLATE MALT

Gladfield Light Chocolate Malt is a lighter version of our Dark Chocolate Malt. It is produced in a similar way but roasted to a lower temperature and has a lighter colour. This malt gives fantastic roasted and espresso coffee like flavours. A great addition to Stouts and Porters.

EBC Test Method	Specification
Moisture (max) %	4.5
Extract – Fine Dry min%	71
Wort Colour	850–1100
pH	5.62–5.65
Typical Colour	950

USE: Adds coffee, chocolate and roast flavours.

RATE: Up to 15%.

CRYSTAL MALTS

SPECIALITY

Crystal Malts, also known as Caramel Malts, are used to add colour, flavour and sweetness to beer. Gladfield's Crystal Malts are made from lower to mid-range nitrogen winter or autumn barley varieties, that are soaked in water, germinated, left wet and then heated. This converts the sugars while they are still in the grain. We then roast our Crystal Malts in our high-tech purpose-built roasting drum making sure that the crystallisation process is even throughout. This gives a sweetness and even colour to the final malt. Crystal Malts have no diastatic power, so must always be used in conjunction with a base malt. Crystal Malt can be used in varying amounts and intensities to an array of beer styles to add colour, flavour and aroma to the beer. It is important to note that our Crystal Malt must be used fresh to get the best results.

LIGHT CRYSTAL MALT

EBC Test Method	Specification
Moisture (max) %	6.5
Extract – Fine Dry min%	78
Wort Colour	40–70
pH	5.15
Typical Colour	50

USE: Adds mild sweet caramel flavours and body.

MEDIUM CRYSTAL MALT

EBC Test Method	Specification
Moisture (max) %	6
Extract – Fine Dry min%	78
Wort Colour	90–130
pH	4.84
Typical Colour	105

USE: Adds full sweet caramel flavours and body.

DARK CRYSTAL MALT

EBC Test Method	Specification
Moisture (max) %	6
Extract – Fine Dry min%	78
Wort Colour	175–225
pH	4.7
Typical Colour	200

USE: Adds a nutty bittersweet caramel flavour and body.

RATE: Up to 25%.

CRYSTAL WHEAT MALT

SPECIALITY

LIMITED RELEASE

SKU AVAILABLE ON REQUEST ONLY

Crystal Wheat is a challenging malt to make in the roaster. The wheat grain has no husk, so as you saccharify the grain in the roaster the risk of sticking to the roaster drum is high. Doug and the team carefully play with temperatures on the roaster to allow almost 100% saccharification without compromising the flavours and most importantly the roaster!

This is a limited edition, but the team are happy to replicate it if the demand is there for this malt.

Recommending at a ratio of 10% on a Saison would be our pick. Also, this malt would complement beer styles like Witbier and Berliner Weisse. But let's not be limited to these styles, let's experiment with any style you see fit, because, why not!?

EBC Test Method	Specification
Moisture (max) %	6, Max 10
Wort Colour	51
pH	5.4
Protein	11.2
Brewing Parameters	Specification
Yield Potential	1.021
Yield %	49.62

RATE: Up to 25% but as with all wheat consider adding a few oat hulls as the ratio increases to assist lautering efficiency.

DISTILLERS MALT

BASE / DISTILL

Gladfield's Distillers Malt is a premium malt produced exclusively from distilling barley varieties with the right nitrogen content. The barley has been gently kilned to preserve enzyme content and the resulting malt has both high extract and diastatic power.

Distillers Malt will add malty, sweet flavours to the finished whisky. Our Distillers Malt is primarily suited to single malt distilling and can be used in conjunction with Gladfield's Peat Smoked or Manuka Smoked Malts if required.

All our Distiller Malt varieties are made from non-glycosidic nitrile barley.

Gladfield also make smoked malts – Peat Smoked Malt and Manuka Smoked Malt.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3
Extract – Fine Dry min%	80	81
Extract – Coarse Dry		80
Extract – Fine As-is		79
Extract – Coarse As-is		78
Saccharification time	10	10
Odour		normal
Wort Colour		5
Total Nitrogen (%)	1.4–1.7	1.65
Kolbach Index	38–43	40
pH	5.8–6	5.9
Diastatic Power (WK) min.	240	265
FAN (mg/l) min	120	125
Friability (min) %	85	88
Glassy Corns (max) %		0.5
P.U.G. (max) %		1

Other Information	Specification	Typical Analysis
Predicted Spirit Yield	450L/ton	
Glycosidic Nitrile	0g/tonne max	
DMSp (ppm)	3.2	0.1 – 5

USE: Primarily suited for making single malt whiskies.

RATE: Up to 100%.

ECLIPSE WHEAT MALT SPECIALITY

ALSO KNOWN AS: Midnight Wheat

A bitterless black malt, Eclipse Wheat is the best way to add the smoothest dark brown/black colour to your beers without accompanying bitterness and with a very subtle flavour contribution.

Consider Eclipse Wheat as the blackest colour malt. Use for many styles when you want to adjust for colour, while adding a delicious minor roast coffee note. You can use this in applications where you're looking for similar colouring characteristics as Roasted Barley without the dark espresso character or potential astringency that can sometimes come from very dark barley malts. Eclipse Wheat is huskless and will not carry bitterness into your beer.

Use in higher proportions to make your black IPAs, Porters and Stouts blacker; adjust colour on your Belgians, Ales and Milds; and add depth to your Schwarzbiers. Use in place of debittered black malt and dehusked barley malts.

The subtle and smooth flavour means Eclipse Wheat is suited for a much broader range of applications than other roast malts or chocolate malts. Including bringing the darkness to uncommon styles like Lagers, Wits and Saisons.

EBC Test Method	Specification
Moisture (max) %	2.5
Extract – Fine Dry min %	74
Wort Colour	1300+
pH	4.93
Typical Colour	1400

USE & RATE: 1–2% for little to no flavour contribution, minor colour adjustment; 2–6% to add more colour with very smooth roasted coffee and chocolate notes; 7–10% in a larger ratio for more definite colour adjustment, velvety-smooth subtle roast character.

GERMAN PILSNER MALT BASE

Newly developed from an old world style malt, our German Pilsner Malt is the perfect base to use with Ales and Lagers. We start with high nitrogen, plump spring barley that goes through our traditional long germination process, followed by a light kilning. This malt is designed to lauter well as well as provide a solid extract. It also allows the brewer to add in flavour and manipulate this final result. We call it here at the maltings, the 'marshmallow malt', sweet but no flavour.

The higher protein barley will maintain a lot of medium chain proteins that provide both body and head retention. The flavour of this malt is crisp, clean and refreshing with a lovely pale straw colour.

Recommend to use this malt when brewers are looking for a clean, non-biscuity flavour to the finish of the beer. Typical Bohemian style pilsners.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3.5
Extract – Fine Dry min%	79	81
Extract – Coarse Dry		80.8
Extract – Fine As-is		78.5
Extract – Coarse As-is		77.5
Saccharification time	10	10
Odour		normal
Wort Colour	3.0–4.5	4
Total Nitrogen (%)	1.45–1.75	1.6
Kolbach Index	37.0–42	41
pH	5.7–6.0	6.0
Diastatic Power (WK) min.	240	250
FAN (mg/l) min	135	140
Friability (min) %	85	94
Glassy Corns (max) %	2	0.6
P.U.G. (max) %	5	1.0
Screenings > 2.8 mm		89%
Screenings 2.5–2.8		10%
Screenings 2.0–2.5 mm		1%
Screenings < 2.0 mm		0%

Other Information	Specification	Typical Analysis
DMSp (ppm)	2.5	0.1 – 5

USE: Base malt for any beer style, light in colour with a clean sweet flavour.

RATE: Up to 100%.

GLADIATOR MALT

SUB-BASE

ALSO KNOWN AS: Dextrin and/or Carapils®

Our Gladiator Malt is a dextrin malt and has proved very popular for use in a wide range of beer styles. This malt has a high amount of unfermentable sugars which helps to provide extra foaming stability, mouth feel and body to the beer without adding too much colour.

EBC Test Method	Specification
Moisture (max) %	5
Extract – Fine Dry min%	81
Wort Colour	5–10
Typical Colour	8

USE: To provide extra foam stability, body and mouth feel to the brewed beer.

RATE: Up to 15%.

GOLDEN OAT MALT SPECIALITY

Golden Oat Malt is our newest malt using our Big O grain. The oats are germinated in the same way as our Big O Malt, then roasted in small batches to ensure an even saccharification and colour, just as our Crystal Malt recipe. Gladfield Golden Oats are crystallised in their own husk giving you better lautering and adding a creamy texture and a beautiful orange hue colour to your beer. The availability of this malt is something we have planned for, so if you like it and want to use it on a core range beer, we will ensure to have it available for you!

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	Max 5	4.8
Extract – Fine Dry min%		70
Protein %		11.5
Colour (EBC)	20–25	24
Lovibond Colour (calculated)		12.18
pH		5.50
Diastatic Power		0 Linter

USE: Adds a creamy texture and a beautiful orange hue colour to your beer.

RATE: Up to 20%.

LAGER LIGHT MALT BASE

Lager Light Malt has been subjected to a gentler kilning cycle so that a lower coloured base malt is produced. This malt is made especially for brewing an all malt lager where a light colour is desirable. This base malt can also be used alongside Gladfield Wheat Malt to brew a delicate, bright, clean malt profile wheat beer where a low colour formation is desired.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3.5
Extract – Fine Dry min%	79	81
Extract – Coarse Dry		80.8
Extract – Fine As-is		78.5
Extract – Coarse As-is		77.5
Saccharification time	10	10
Odour		normal
Wort Colour	2.5–2.9	2.7
Total Nitrogen (%)	1.4–1.7	1.6
Kolbach Index	35–41	39
pH	5.8–6.1	6
Diastatic Power (WK) min	240	250
FAN (mg/l) min	120	130
Friability (min) %	85	94
Glassy Corns (max) %	2	0.6
P.U.G. (max) %	5	1.0
Other Information	Specification	Typical Analysis
DMSp (ppm)	4.4	0.1 – 5

USE: A base malt for any style of beer. This malt is light in colour, with a sweet, clean flavour.

RATE: Up to 100%.

MAIZE MALT

SUB-BASE

Premium maize grown in the South Island of New Zealand that has a starchy taste, blend flavour.

Maize Malt adds mild, less malty flavour to beers and less body. It also provides a drier and crisper beer. Typical beer styles include American Light Lager, Mexican Lagers, and Pilsners. It is also suited for Bourbon Whisky making. Typical usage rates are up to 25% in beer and 51% in distilling. You should crush Maize Malt along with other malts. No need to adjust the mill, cook it, step mash or mill it separately*.

We recommend adding Rice or Oat Hulls to recipes using more than 10% of Maize Malt to avoid a stuck mash.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	3.0–5.0	4.50
Extract – Fine Dry min%	60–75	67
Extract – Coarse Dry		57
Extract – Fine As-is		64
Extract – Coarse As-is		54.00
Saccharification time		<10
Odour		Normal
Wort Colour	2.5–2.8	2.5
Total Nitrogen (%)	1.3–1.6	1.4
Kolbach Index	20–22	21
pH	5.8–6.0	5.85
FAN (mg/l) min	80–100	87

USE: Maize Malt adds mild less malty flavour to beers. Provides a drier and crisper beer.

RATE: Up to 100%.

*You can keep the same mill gap size and mill the Maize with the other malts on your grain bill to aid the flow. If your mill rollers have good knurling, this will work. However, the Maize has a slippery outer skin, and some brewers have been milling the Maize Malt by wetting the grain before mixing with the other malt prior milling. Or you can bash the Maize Malt bag with a rubber hammer before milling.

MANUKA SMOKED MALT

BASE / DISTILL

Gladfield Malt is proud to produce the world's only Manuka Smoked Malt. We take the same barley varieties that we use to make our top quality Distillers Malt and place the grains in our in-house smoker with 100% New Zealand grown West Coast Manuka wood. Our Manuka Smoked Malt is smooth and overlaid with floral, sweet characteristics. Our Manuka Smoked Malt can either be distilled or brewed.

This malt would impart a unique Kiwi flavour to an old German style beer like a Rauchbier or in any other beer style where a level of smokiness is required. We recommend our Manuka Smoked Malt can be used anywhere between 1% to 100% depending on the degree of smoke required.

This malt is also excellent when distilled, and imparts a smooth, natural smokiness with distinct Manuka notes to the finished whisky that is unique to New Zealand.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3.8
Extract – Fine Dry min%	79	81.5
Extract – Coarse Dry		80.5
Extract – Fine As-is		78
Extract – Coarse As-is		77.7
Saccharification time	10	10
Odour		normal
Wort Colour	3–5	3.9
Total Nitrogen (%)	1.35–1.65	1.5
Kolbach Index	35–41	40.5
pH	5.7–6.1	6
Diastatic Power (WK) min		250
FAN (mg/l) min	120	135
Friability (min) %	85	95
Glassy Corns (max) %		0.4
P.U.G. (max) %		0.8

USE: Suitable for single malt distilling and brewing where a unique Manuka smoke characteristic is required. If distilling single malt whisky please use at 100% rate.

RATE: Between 1% to 100%.

MUNICH MALT

SUB-BASE

Our Munich Malt is perfect for brewing classic malty continental lagers and robust ales.

Gladfield's Munich Malt is germinated using barley with a slightly higher nitrogen content to create more intense colour through greater Maillard reactions. This is achieved by allowing higher levels of moist air recirculation and low temperatures to occur during the early and intermediate stages of the kilning cycle followed by a final long high temperature cycle.

This kilning process results in a malt which is rich, sweet, toasty and imparts a biscuit flavour with a touch of breadiness. Our Munich Malt imparts a deep orange colour and a malty, toasted, nutty, grainy flavour to the brewed beer.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3
Extract – Fine Dry min%	79	81
Extract – Coarse Dry		79.5
Extract – Fine As-is		79
Extract – Coarse As-is		77.8
Saccharification time	10	10
Odour		normal
Wort Colour	14–17	14.5
Total Nitrogen (%)	1.6–1.8	1.65
Kolbach Index	37–43	40
pH	5.6–5.9	5.9
Diastatic Power (WK) min.	160	170
FAN (mg/l) min	120	125
Friability (min) %	85	88
Glassy Corns (max) %		0.5
P.U.G. (max) %		1

USE: Munich Malt is a base malt suitable for brewing German-style beers, or when a dry toasted nutty flavour is required.

RATE: Up to 100%.

OAT HULLS

ALSO KNOWN AS: Husks

Oat hulls are the outer shell layer of the oat, inedible and normally removed from the oat. When used for brewing the hulls improve the filter bed of the mash to decrease the likelihood of a stuck mash. Oat hulls are non-fermentable, and provide bulk helping prevent the mash from settling and becoming stuck during the sparge. Hulls are generally used when making wheat or rye beers.

Please note: Gladfield does not produce this product. Only available to order within New Zealand.

RAW GRAINS

Gladfield Malt can provide malting quality raw barley, wheat, rye and oats on request. All our grains are sourced from farms located in Canterbury, New Zealand.

The grain is screened to remove any chaff and small grains and is perfect for adding something unique to a beer or a whisky. Raw grains will also bring some unfermentable carbohydrates to the brew when unmalted, giving more body to the finished beer.

Please note: Raw grains are only available to order within New Zealand.

PEAT SMOKED MALT BASE / DISTILL

To create Gladfield's Peat Smoked Malt, our wonderful Distillers Malt is smoked in our in-house smoker using 100% New Zealand peat. The resulting malt is infused with a traditional mild, soft earthy flavour with phenols 50+ppm as standard. We can customise the phenols levels upon request.

This malt is primarily suited for making single malt whisky but is also great when used to flavour Scotch ales or darker maltier beers.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	4
Barley Variety	Laureate	Laureate
Extract – Fine Dry min%	79	81
Extract – Coarse Dry		80.8
Extract – Fine As-is		78.5
Extract – Coarse As-is		77.5
Saccharification time	10	10
Odour		normal
Wort Colour	3.2–5	3.8
Total Nitrogen (%)	1.4–1.7	1.6
Kolbach Index	35–41	39
pH	5.7–6.0	6
Diastatic Power (WK) min.	240	250
FAN (mg/l) min	120	130
Friability (min) %	85	94
Glassy Corns (max) %	2	0.6
P.U.G. (max) %	5	1
Phenols		50+ppm

USE: Primarily suited for the making of single malt whisky. Adds a unique mild peaty taste to whiskies. If distilling single malt whisky please use at 100% rate.

RATE: When used to flavour Scotch ales or darker malty beers use between 5% to 25%.

PILSNER MALT BASE

ALSO KNOWN AS: Pale and/or Lager Malt

Gladfield Pilsner Malt is made from English and European bred barley varieties. Only plump low-protein barley are used to make our Pilsner Malt. This style of barley produces higher extracts and helps eliminate potential protein haze issues in the beer. Our carefully controlled kilning gives a clean malty character without adding too much colour.

Pilsner or Lager Malt can be used to produce ales as well as lagers. This malt does have sufficient diastatic power to convert the addition of 10–20% coloured malts to the mash, but it is not designed for large amounts of unmalted adjuncts. Brewers should also note that it is important that the mash pH is controlled properly to obtain the best efficiencies and outcomes in the finished beer.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3.5
Extract – Fine Dry min%	79	81
Extract – Coarse Dry		80.8
Extract – Fine As-is		78.5
Extract – Coarse As-is		77.5
Saccharification time	10	10
Odour		normal
Wort Colour	3.2–4	3.8
Total Nitrogen (%)	1.4–1.7	1.6
Kolbach Index	35–41	39
pH	5.7–6	6
Diastatic Power (WK) min.	240	250
FAN (mg/l) min	120	130
Friability (min) %	85	94
Glassy Corns (max) %	2	0.6
P.U.G. (max) %	5	1.0
Other Information	Specification	Typical Analysis
DMSp (ppm)	3.5	0.1 – 5

USE: As a base malt for any beer style. It is light in colour and imparts a sweet, clean flavour when brewed.

RATE: Up to 100%.

REDBACK MALT

SPECIALITY

RedBack Malt is a unique malt made by Gladfield Malt.

This malt is prepared using a special process before going into the roaster, and then roasted until Maillard reactions occur. The wort colour is bright with good clarity but most importantly is a lovely red hue. RedBack Malt gives a lovely malty dried fruit and toasted flavour to the finished beer.

The wonderful red colour is added to the beer without imparting an opalescence that can occur with other similar malts. RedBack Malt is also used to increase body and head retention in the finished beer due to the lower modification level and saccharification in the roaster. It can be used up to 15%, and complements a range of base malts.

EBC Test Method	Specification
Moisture (max) %	6.5
Extract – Fine Dry min%	78
Wort Colour	60–80
pH	5.55
Typical Colour	65

USE: RedBack Malt adds malty, dried fruit and toasted flavours as well as a red hue.

RATE: Up to 15%.

REDBACK WHEAT MALT SPECIALITY

RedBack Wheat Malt is a unique wheat malt made by Gladfield Malt.

Just like our popular Redback Malt, this malt is prepared using a special process before going into the roaster, and then roasted until Maillard reactions occur. Because the wheat does not have its husk, this style is a lot milder in flavour compared to Redback Malt. Redback Wheat will add a lot of colour to the beer without any harsh flavours.

RedBack Wheat Malt is also used to increase body and head retention in the finished beer due to the lower modification level and saccharification in the roaster. It can be used up to 15%, and complements a range of base malts.

EBC Test Method	Specification
Moisture (max) %	6.0
Colour EBC	40–60

USE: RedBack Wheat Malt adds malty, dried fruit and toasted flavours as well as a red hue.

RATE: Up to 15%.

ROASTED MALTS

SPECIALITY

ROASTED BARLEY MALT

Roasted Barley, as the name suggests, is made from unmalted barley. It has a slightly darker colour than our Gladfield Chocolate Malt range and is ideally suited for use in a Dry Stout. Roasted Barley adds a lovely rich roast flavour and dark espresso like flavours to brewed beer. Like all roasted malts, it should be used fresh to get the best out of it.

EBC Test Method	Specification
Moisture (max) %	4.5
Extract – Fine Dry min%	72
Wort Colour	1200–1500
pH	5.44
Typical Colour	1350

USE: Adds a rich roast character and dark espresso like flavours.

RATE: Up to 10%.

ROASTED WHEAT MALT

Our Roasted Wheat Malt is produced by roasting unmalted wheat. Using Gladfield Roasted Wheat is an excellent way to impart roasted coffee and chocolate flavours without adding any of the bitterness that can sometimes come from using Roasted Barley or Chocolate Malts. This malt is a great addition to any darker beer style.

EBC Test Method	Specification
Moisture (max) %	4.5
Extract – Fine Dry min%	71
Wort Colour	450–600
pH	5.46
Typical Colour	550

USE: Adds light roast coffee and chocolate flavours and unique wheat impact.

RATE: Up to 15%.

ROLLED/FLAKED GRAINS

Flaked barley, wheat and rolled oats are adjuncts and add creaminess and head retention to the finished beer. They both impart a rich, smooth, and grainy flavour appropriate for Stouts and Porters, and can also add characteristics such as spiciness and dryness to the finished beer.

Harraway's flaked grains are produced much like their rolled oats. Raw barley is steamed and then pressed through a pair of rollers. Flaked grains can be added directly to the mash with base and speciality malts.

FLAKED BARLEY

Flaked barley performs well as an adjunct in German style Pilsners, as it can produce lighter colour without lowering the gravity. *Supplied in New Zealand only.*

ROLLED OATS

Harraway's Jumbo Oats are a versatile adjunct that we offer alongside our malt range for our customers' convenience. These wholegrain oats have been rolled into flakes that can then be added directly to the mash with base and speciality malts. Rolled oats are also effective for adding body to low alcohol beers.

FLAKED WHEAT

Flaked wheat provides a typical wheat flavour, colour and aroma, free of preservatives and additives. Often used in wheat beers and saisons.

USE: Adds smooth, silky mouth feel. Balanced sweetness and creamy head retention to beer styles such as Oatmeal, Porters and Witbiers.

RATE: Up to 15%.

Gladfield

RYE MALTS

RYE MALT SUB-BASE

Our Rye Malt is produced from locally grown rye corn. Rye does not have an outer husk so it benefits from a finer mill setting than our malted barleys. The rye is malted with the same care as our other malts and modifies beautifully in the kiln.

EBC Test Method	Specification
Moisture (max) %	6
Extract – Fine Dry min%	81
Saccharification time	10
Wort Colour	4–10
Total Nitrogen (%)	1.6–1.9
Kolbach Index	40–60
pH	5.7–6.2

USE: Gives colour, spicy flavours and a clean, dry mouth feel.

RATE: Recommend starting with 10%, can then be increased up to 50% for more rye flavour.

BLACK FOREST RYE SPECIALITY SEASONAL RELEASE

Think of Shepherds Delight Malt, now open your mind to the possibility to brew a beer with the same great attributes that Shepherds Delight Malt offers (red colour, malty, currant and fruit cake flavours) using Rye as the grain. The possibilities are huge. Add spiciness to Old Ales, add complexity to ESB, Pale Ales, you name it. And guess what? No one else in the world produces anything like this malt other than Gladfield, so you are you in for a treat.

Usage rate of up to 10%. Colour – 78 EBC.

EBC Test Method	Specification
Moisture (max) %	< 4.5
Extract – Fine Dry min%	71
Wort Colour	300–450
pH	4.59

USE: Provides a malty, toasted, cola flavour and a deep red hue to beers.

RATE: Up to 10%.

RYE MALTS CONTINUED

CHOCOLATE RYE MALT SPECIALITY SEASONAL RELEASE

Richly roasted to bring a smooth espresso creaminess to your dark beers with a touch of rye spiciness. Beautiful in a porter or oatmeal stout where the coffee spice character is particularly well matched with the roast malts. Adds a further level of complexity to Vienna Malt in a Dunkel, or even something a little uncommon to a mild or English brown.

EBC Test Method	Specification
Moisture (max) %	3
Extract – Fine Dry min %	74
Wort Colour	850–1100
pH	4.84
Typical Colour	800

USE: Enhance aroma and flavour characters without imparting bitterness or astringency.

RATE: 1–5%.

CRYSTAL RYE MALT SPECIALITY SEASONAL RELEASE

Wetting the rye and carefully roasting produces a remarkably delicious and complex crystal malt with a slightly spicy caramel finish and a nutty aroma. Superb in a range of beers including Pales and IPAs. Brings a new level of complexity to Golden Ryes and is fantastic in a rye lager where a little spiciness changes things up rather nicely.

EBC Test Method	Specification
Moisture (max) %	4.5
Extract – Fine Dry min %	79
Wort Colour	50–80
pH	5.17
Typical Colour	70

USE: Adds a nutty bittersweet caramel flavour and body.

RATE: Up to 25% but as with all ryes consider adding a few rice hulls as the ratio increases to assist lautering efficiency.

SHEPHERDS DELIGHT MALT SPECIALITY

Shepherds Delight is a unique malt made by Gladfield Malt.

Shepherds Delight Malt has a concentrated or intense deeper flavour than our Aurora Malt. It will provide a potent bready, toasted, cola flavour with a lingering fruity sweetness and red hue to the brewed beer. This malt should be used sparingly because it gives a powerful malt flavour to the beer similar to a decoction mash. Using too high a concentration of this malt could lead to bitterness in the final beer. We recommend combining Shepherds Delight Malt with our Vienna Malt to give a balancing sweetness.

Beers made with Shepherds Delight favour from allowing to age for few weeks so flavour mellows out.

EBC Test Method	Specification
Moisture (max) %	5
Extract – Fine Dry min%	78
Wort Colour	300–350
pH	4.53
Typical Colour	320

USE: Provides a malty, toasted, cola flavour and a deep red hue to beers.

RATE: Up to 10%.

SOUR GRAPES MALT

SUB-BASE

Gladfield's Sour Grapes Malt is designed to be used to adjust pH in the brew house mash. Sour Grapes Malt is produced by encouraging lactic growth during germination from naturally present bacteria on the grain, and then washing the malt in a lactic bath using the same *Lactobacillus* strain, before kilning.

The acid content of our Sour Grapes Malt is 2%. As a guide, 1% of this milled malt will drop mash pH by 0.2. It can also add a mild lactic sourness to the brewed beer. We recommended between 1% and 5% of our Sour Grapes Malt is used to achieve target mash pH.

EBC Test Method	Specification
Moisture (max) %	6.5
Extract – Fine Dry min%	26
Wort Colour	3–6
pH	3.3–3.6

USE: Use to lower mash pH.

RATE: Up to 5%.

SUPERNOVA MALT SPECIALITY

Supernova Malt is a unique malt made by Gladfield Malt.

Supernova Malt is a roasted malt from Gladfield that adds nutty, toasted caramel flavours to a beer. It can be used as a replacement for traditional crystal malts to change the flavour characteristics and reduce the beers residual sweetness. We start this malt with Canterbury winter barley and take it through our germination process before it is roasted to develop flavour and colour.

This is a great malt to be used in any beer style. We have already seen it used in Pilsners and IPAs between 10–25%. We also recommend its use in an Amber Ale up to 25%, it adds a rich depth of malty flavour and really makes this style shine. It goes well in a Porter up to 10–15%, complementing the darker roast malts and adding complexity. Also great for Pale Ales for great toasty caramel flavours that won't overtake the hops, use 5–10%.

EBC Test Method	Specification
Moisture (max) %	6
Extract – Fine Dry min%	71
Wort Colour	95–135
pH	4.85
Typical Colour	114

USE: Adds toasted, caramel, nutty flavours to a beer.

RATE: Up to 25%.

TOFFEE MALT

SPECIALITY

Toffee Malt is a unique malt made by Gladfield Malt.

We make this unique malt by taking a lower to mid-range nitrogen winter or autumn barley variety, roasting the resulting malt at very low temperatures, and then caramelise the malt. The low temperature and slower roasting produces a malt with a very light colour, a chewy consistency, with honey or toffee flavours. Our Toffee Malt is very popular. Not only does it add a wonderful malty, honey toffee flavour to lighter coloured beers but it also enhances beer stability, body and mouth feel.

Because of its high moisture content, we recommend that brewers mill the Toffee Malt mixed with other malts to avoid clogging the malt mill.

EBC Test Method	Specification
Moisture (max) %	7.5
Extract – Fine Dry min%	74
Wort Colour	10–20
pH	5.42
Typical Colour	12

USE: Toffee Malt adds toffee and honey flavours and has a low colour impact.

RATE: Up to 25%.

VIENNA MALT

SUB-BASE

Gladfield's Vienna Malt is made using a blend of winter and spring barley varieties with a higher nitrogen content. Our germination and kilning results in a sweeter, malty character with a golden to orange colouring that is slightly darker than our Ale Malt. Vienna Malt imparts hints of toast or biscuit malt aromas and flavours to the finished beer. Due to its light colour, Vienna Malt is very versatile and complements a wide range of other malts. Our Vienna Malt has a Kiwi twist but still has the usual characteristics of typical Vienna Malt and is ideal for brewing darker lagers or Märzen style beers. We have found our Vienna Malt combines particularly well with our Gladiator Malt and Toffee Malt, and gives a big white head and a lovely golden colour to make a very drinkable session beer.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	5	3.5
Extract – Fine Dry min%	79	80.5
Extract – Coarse Dry		79
Extract – Fine As-is		78
Extract – Coarse As-is		77
Saccharification time	10	10
Odour		normal
Wort Colour	6.5–8.5	6.8
Total Nitrogen (%)	1.6–1.8	1.65
Kolbach Index	37–43	40
pH	5.6–5.9	5.9
Diastatic Power (WK) min.	200	210
FAN (mg/l) min	120	140

USE: Vienna Malt has a sweet malty character and light toast malt flavour. Perfect for brewing a Vienna lager or a Märzen style beer.

RATE: Up to 100%.

WHEAT MALT SUB-BASE

Gladfield Wheat Malt is produced from an old English wheat variety that modifies very well, resulting in a higher yield. This malt gives clean light coloured wort. Wheat Malt can be used in many beer styles to add head retention, body and a wheat malty flavour to the finished beer.

All the wheat grain that we use on our Wheat Malt is single sourced from the Birkett Family from Leeston, Canterbury.

EBC Test Method	Specification	Typical Analysis
Moisture (max) %	6	4.8
Extract – Fine Dry min%	81	85
Extract – Coarse Dry		84
Extract – Fine As-is		81
Extract – Coarse As-is		80
Saccharification time	10	10
Odour		normal
Wort Colour	3.2–4.2	4.1
Total Nitrogen (%)	1.5–1.9	1.7
Kolbach Index	33–40	34
pH	5.7–6.2	5.9
Diastatic Power (WK) min.	240	260
FAN (mg/l) min		85

USE: For making wheat beers and to add body and head retention.

RATE: Up to 70%.



COMPLEMENTARY PRODUCTS

In addition to our extensive range of quality malts, we supply complementary products that allow you greater control over your brew. These can help with water treatment, enzymes, colloidal stability (beer clarity), flavour stability, wort clarification, fermentation, beer clarification and foam control.

We also supply brewers and distillers yeast.

Here at Gladfield Malt, we have the experience and expertise to assist and support our customers. If you have any questions about any of our malts or complementary products, get in touch!

Data sheets on our complementary products are available upon request from Gladfield Malt.

“The consistency of the quality of Gladfield Malts is why we have been using them for years. The consistent quality reduces the variability in our brew process, thus providing a consistent beer product. They provide the vast majority of our base and specialty malts – and it’s an outstanding product.”

– Philip O’Shea, Five Barrel Brewing,
Wollongong NSW

BREWING AIDS*Distributor for Lallemand Brewing, Murphy & Son.*

Type	Used for
ALDC1	Prevents Diacetyl Formation
Alginex	Auxiliary Fining
Amyglucosidase (AMY)	Brut Style and Low Gravity Fermentation
Antifoam FD20PK	Kettle and Fermenter Antifoam
Aromazyme	Biotransformation to enhance hop flavour and aroma
Brewers Clarex	Prevents Chill Haze, Chop Up Gluten
Glucanase	Enzyme
Koppakleer	Carrageenan/Kettle Fining – tablets and can be added to whirlpool
Protafloc	Kettle Fining
Super F	Vegan Fermenter Fining
Servomyces	Zinc-enriched Yeast
YeastLife O	Complete yeast nutrition for pure sugar fermentations, gluten
Yeast Vit	Yeast Nutrient
Zetolite	Reduce sulphidic off flavours in fermented beverages

BREWING ADJUNCTS*Distributor for Harraways, Davis Trading, Fonterra.*

Type	Used for
Dextrose Monohydrate	Mouthfeel
Flaked Barley	Head Retention and Mouthfeel
Flaked Wheat	Head Retention and Mouthfeel
Lactose (220 Mesh)	Mouthfeel
Maltodextrin 10	Mouthfeel – Less Fermentable
Oat Hulls	Lautering Aid
Raw Barley	Head Retention and Mouthfeel
Raw Wheat	Head Retention and Mouthfeel
Rolled Oats	Head Retention and Mouthfeel

BREWING SALTS & WATER*Distributor for Clark Products, IMCD.*

Type	Used for
Calcium Carbonate	Food Grade Water Treatment
Calcium Chloride	Food Grade Water Treatment
Calcium Sulphate (Gypsum Salt)	Food Grade Water Treatment
Lactic Acid	80% 0 Mash pH Adjustment
Magnesium Sulphate (Epsom Salt)	Food Grade Water Treatment

COMPLEMENTARY PRODUCTS are subject to availability in your country.

YEAST

Distributor for Lallemand Brewing.

Type	Brewing Style
Abbaye	Belgian-Style Ale Yeast
Belle Saison	Belgian-Style Ale Yeast
Bry-97	American West Coast Ale Yeast
Diamond	Lager Yeast
Kolsch	Kolsch Style Ale
LoNa	Low Alcohol Hybrid Ale Yeast
London ESB	Classic English ESB Ale Yeast
Munich Classic	Wheat Beer Yeast (Banana & Cloves)
New England	East Coast American Ale Yeast
Nottingham	Ale Yeast
Nova Lager	Modern Hybrid Lager Yeast
Servomyces	Zinc-enriched Yeast Nutrient
Verdant IPA	Ale Yeast
Voss	Keveik Style Yeast. Hot fermentation recommended for ales
WildBrew Philly Sour	Sour Yeast that produces alcohol and acidifies wort at the same time
WildBrew Sour Pitch	Sours
Windsor	True English Yeast Strain
Wit	Relatively Neutral Strain Belgian Wit-Style Yeast

OTHER PRODUCTS

Type	Description
Sensory Kit	Containing six of the most common off-flavours to beers of all styles
Clark Process CS – PBW	Sub for the famous PBW – Powder Brewing Wash

COMPLEMENTARY PRODUCTS are subject to availability in your country.



**1000 HOURS
OF SUNSHINE
IN EVERY GLASS**

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