

A LITTLE BOOK OF BEER RECIPES THAT PASSED THE PUB TEST

FEATURING
AUSSIE HOPS
BURSTING WITH
FLAVOUR



Thinking about using Aussie hops for the first time, or doing something different with an old favourite?

This little book is full of some very enjoyable beer recipes to help get your creative juices flowing, and demonstrate which aromas and flavours will show up in beer based on how and when our Aussie hops are commonly used.

A huge shout out to all the breweries who shared their tried and true recipes. We're so grateful for your generosity, and passion for our Aussie hops. Cheers to a bright future of them absolutely shining in even more great beers.

Aussie hops are like nothing else on earth. They are incredibly unique and versatile. We rely heavily on them in almost all of our core range beers, and look to incorporate them in almost every new recipe we come up with.

**JESSE SEARLS,
YOUNG HENRYS BREWERY**

PLANETS ALIGN WITH AUSTRALIA'S

Eclipse®

MANDARIN & CITRUS PEEL

Aussie hops provide unique and intense flavours and aromas which make beers really stand out in the crowd. We are particularly enamoured with Enigma, Eclipse and Galaxy, all of which take part in our core range beers.

BRENTON SCHOEMAKER,
KICK BACK BREWING





Origin story

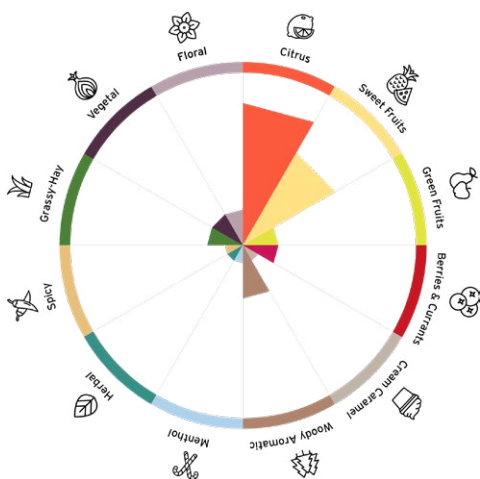
Eclipse® 04-337-016 c.v. was created by HPA's breeding program in 2004 through a cross-pollination of high alpha Australian and North American parents whose ancestry can be traced all the way back to 1915. Previous generations of cross-pollination include Fuggle, Brewer's Gold, Comet, and Pride of Ringwood.

When Dr Simon Whittock assumed control of the HPA breeding program in 2007, he went through a process of sorting through the experimental cohort, selecting a handful of leading varieties for deployment in a large trial garden at Rostrevor Hop Gardens in Victoria, Australia. At first, Eclipse® was second choice to another experimental hop, HPA-035, but the half-sister of world-renowned Galaxy® catapulted to the front of the cohort once brewing trials began.

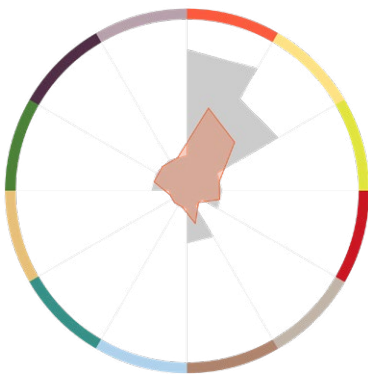
It's sweet mandarin, zesty citrus peel and fresh pine needle characteristics shone through in neighbour Bridge Road Brewers' Dark Harvest collaboration with Mikeller in 2012, and CBCo's Pioneer IPA in 2017. Brewers' response to these expressions were both passionate and commercial, with many committing to forward contracts that allowed HPA to back Eclipse® with significant acreage from the very beginning.

Eclipse® was commercialised in 2020 at 25 tonnes, which marked the milestone of a complete pivot from 100% bittering hops to 100% flavour hops for Australia's largest grower. Since then, its classic hop profile has been featured in a range of beer styles, working well as a single hop or to compliment and elevate other hops by creating layers of complexity and a more balanced hop profile.

Beer sensory



Raw hop sensory



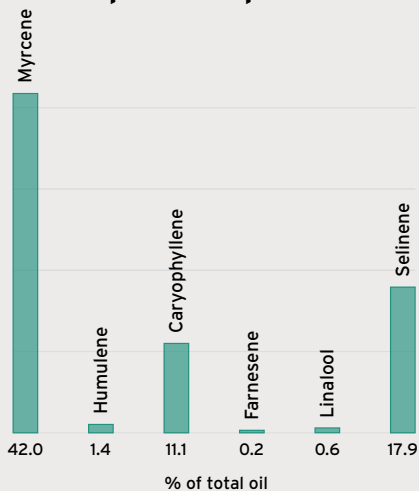
Analytical data

Alpha 17.4 - 19.1% **Beta** 7.2 - 7.9%

Cohumulone 33.0 - 37.0% of α -acids

Total oil 2.5 - 3.0ml/100g

Hop oil composition



Recommended beer styles

Lager, XPA, Hazy Pale, IPA, NEIPA

Eclipse® is also available in
SPECTRUM
 the next generation of
 liquid dry hopping



Pilsner

THE BEER

Unexpected passionfruit that gives way to sweet, sweet mandarin.

THE BASICS

ABV 4.5%

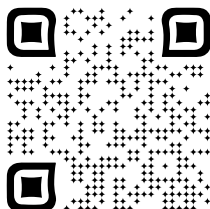
IBU 28.0

OG (SG) 10.2°P (1.041)

FG (SG) 1.7°P (1.007)

EBC (SRM) 5.4 (3.0)

pH 4.3



ADD A BURST OF ECLIPSE®
TO YOUR CAN ART



INGREDIENTS KG/10HL LB/10BBL

Malt

Pale 140 362

Carapils 25 65

Hops

Eclipse® T90 0.2 0.5 First wort

Eclipse® T90 0.3 0.8 Kettle 10min remaining

Eclipse® T90 0.8 1.9 Whirlpool 15min contact time

Eclipse® T90 3.8 9.7 Dry hop Day 7 of ferment

Yeast

S-189

METHOD + TIMINGS °C °F DETAILS

Mash 66 151 Mash in at temperature, saccharification rest for 20min

78 172 Raise to temperature, mash out immediately

Boil 60min

Knockout 13 56

Fermentation 16 61

Diacetyl rest 16 61 2+ days at temperature until VDK negative

Chill 0 32 7-14 days at temperature, yeast off no later than 48hr after



I find Eclipse to be more subtle than Galaxy. Passionfruit aromas dominate immediately post ferment, but then the mandarin starts to come through. There are still hints of passionfruit in the finished beer, but it's definitely more juicy mandarin than sweet passionfruit. Small doses over a few additions is the way to go.

JUSTIN BISHOP, BRIGHT TANK BREWING



XPA

THE BEER

Orange and almond hazy popping with sweet citrus and fresh berries.

THE BASICS

ABV 5.0%

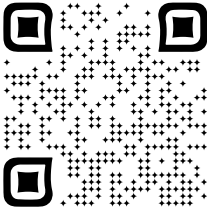
IBU 20.0

OG (SG) 13.3°P (1.054)

FG (SG) 4.1°P (1.016)

EBC (SRM) 7.0 (3.6)

pH 4.3



**ADD A BURST OF ECLIPSE®
TO YOUR CAN ART**

I admire Eclipse hops for their versatility and unique flavour profile. Its balanced combination of citrus, floral, and herbal characteristics adds complexity to any beer. It's ideal for cold side dry hopping, but also works well in late boil additions for additional flavour and aroma.

**DAMIEN MARTIN,
DANGEROUS ALES**

INGREDIENTS KG/10HL LB/10BBL

Malt

Pils 165 425

Malted Oats 33 85

Wheat 16 40

Carapils 16 40

Hops

Eclipse® T90 0.8 2.0 Whirlpool 20min remaining

Comet T90 0.8 2.0 Whirlpool 20min remaining

Mosaic® INCOGNITO® 1.2 3.0 Whirlpool 20min remaining

Eclipse® T90 1.9 5.0 Dry hop Day 10 of ferment

Citra® T90 3.9 10.0 Dry hop Day 10 of ferment

Eclipse® T90 1.9 5.0 Dry hop Day 11 of ferment

Citra® T90 1.9 5.0 Dry hop Day 11 of ferment

Yeast

Verdant IPA

METHOD + TIMINGS °C °F DETAILS

Mash 70 158 Mash in at temperature, rest for 20min

78 172 Rapidly raise to temperature, rest for 10min, mash out

Boil 60-90min

Knockout 18 65

Fermentation 19 66 5-7 days at temperature

Diacetyl rest 19 66 2+ days at temperature until VDK negative

Chill 16 61 4 days at temperature

0 32 4 days at temperature

0 32 5 days, yeast off and remove hop sediment daily



NEIPA

THE BEER

A juicy hazy exploding with mandarin and pineapple flavours, a hint of mint and nice pithy bitterness.

THE BASICS

ABV 5.8%

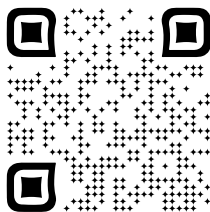
IBU 33.0

OG 14.3°P
(SG) (1.058)

FG 3.8°P
(SG) (1.015)

EBC 7.0
(SRM) (3.5)

pH 4.4



ADD A BURST OF ECLIPSE®
TO YOUR CAN ART



INGREDIENTS KG/10HL LB/10BBL

Malt

Pale Lager 220 570

Rolled Oats 32 83

Chit Wheat 20 52

Golden Naked Oats 20 52

Hops

Simcoe® T90 0.5 1.4 Kettle 20min remaining

Motueka T90 2.0 5.2 Whirlpool 20min remaining

Simcoe® T90 2.0 5.2 Whirlpool 20min remaining

Motueka T90 1.0 2.6 Dry hop Day 3 of ferment

Simcoe® T90 1.0 2.6 Dry hop Day 3 of ferment

Eclipse® SPECTRUM 0.8 2.1 Dry hop Day 5 of ferment

Motueka T90 2.0 5.2 Dry hop Day 5 of ferment

Simcoe® T90 2.0 5.2 Dry hop Day 5 of ferment

Yeast

Verdant IPA

METHOD + TIMINGS °C °F DETAILS

Mash 69 156 Mash in at temperature, rest for 25min
78 172 Raise to temperature, mash out immediately

Boil 60-90min

Knockout 18 65

Fermentation 24 75 Free rise to temperature

Diacetyl rest 24 75 2+ days at temperature until VDK negative

Chill 0 32 7-14 days at temperature, yeast off no later than 48hr after

Adding Eclipse SPECTRUM while the beer is still fermenting helps with dispersibility and mixing in the tank for better flavour extraction.

RORY TAYLOR, SAWMILL BREWERY

CONJURE MAGIC



We are passionate about hops and have been proud to produce many great hop-forward beers over the years. We have a robust single hop brewing trial program that gives us inspiration and informs how we approach using new hops from around the world. We fell in love with Galaxy, Vic Secret, and Ella from doing these single hop trials.

JEREMY MOYNIER, STONE BREWING

A collection of stylized, light grey hop flower icons scattered around the title and above the first paragraph.

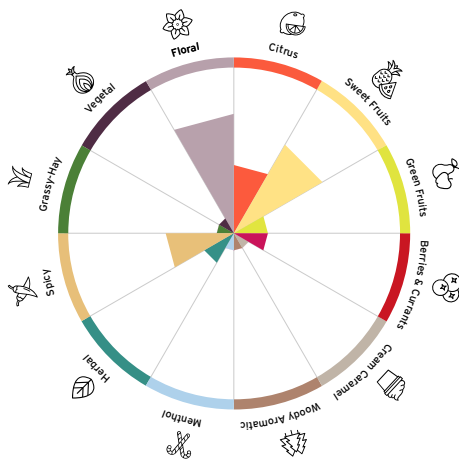
Origin story

Ella™ 01-220-060 c.v., formerly known as Stella, was created by HPA's hop breeding program in 2001 through a cross-pollination of high alpha Australian and Spalt hops, making it the closest Australian grown substitute for European hops.

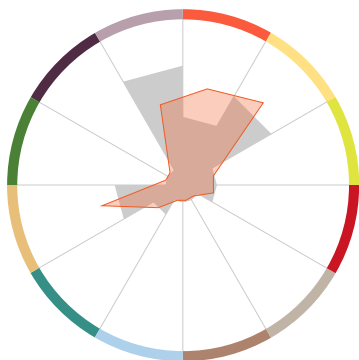
The half-sister of the world-renowned Galaxy® was initially developed in Victoria using pollen collected in Tasmania, capturing hearts and minds with its strong yield potential and consistently positive feedback during brewing trials. Once commercialised in 2011, it was deployed in both Tasmania and Victoria.

Due to its high oil content, the impact of Ella™ in beer changes considerably depending on dose rate and addition point. A low dose on the hot side leads to just the right amount of floral and spice, while a high dose in the dry hop delivers tropical and grapefruit flavours that can be used to balance heavier malt bills and strong yeast characters.

Beer sensory



Raw hop sensory



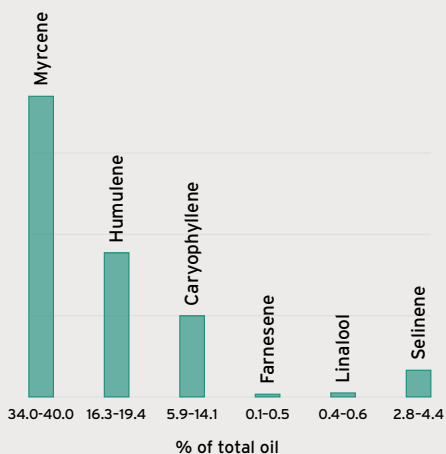
Analytical data

Alpha 16.2 - 18.4% **Beta** 6.5 - 7.5%

Cohumulone 33.0 - 44.0% of α -acids

Total oil 2.4 - 2.8ml/100g

Hop oil composition



Recommended beer styles

Pilsner, Pale Ale, IPA, Saison, Porter

Hefeweizen

THE BEER

Classic banana from the yeast and creamy mouthfeel from the malted wheat works perfectly with the tropical flavour and aroma from the hops.

THE BASICS

ABV 5.4%

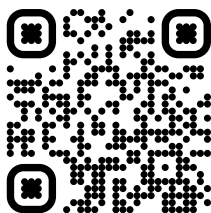
IBU 18.0

OG (SG) 13.5°P (1.055)

FG (SG) 3.5°P (1.014)

EBC (SRM) 10.0 (5.0)

pH 4.5



ADD A GLIMMER OF
ELLA™ TO YOUR CAN ART



INGREDIENTS	KG/10HL	LB/10BBL	
Malt			
Pilsner	136	353	
Wheat	91	235	
Hops			
Ella™ T90	0.2	0.4	Kettle
Ella™ T90	0.4	1.0	Whirlpool
Ella™ T90	7.0	18.1	Dry Hop Post ferment, remove after 5 days
Yeast			
BSY-A0007 Munich Weizen			

METHOD + TIMINGS	°C	°F	DETAILS
Mash	43	110	Mash in at temperature, rest for 10min
	52	125	Raise to temperature, protein rest for 20min
	66	151	Raise to temperature, saccharification rest for 30min
	78	172	Raise to temperature, mash out immediately
Boil			60-90min
Knockout	20	68	
Fermentation	21	70	3-5 days at temperature
Diacetyl rest	22	72	2+ days at temperature until VDK negative
Chill	15	59	5 days at temperature
	0	32	7-10 days at temperature, yeast off after 48hr

Using large doses of Ella in the dry hop brings out the tropical and peach aromas of the hop.

ALANA REES, MOUNTAIN GOAT BEER

IPA

THE BEER

Light floral, watermelon, passionfruit and pine notes lead into intense citrus flavours of medium body and strong bitterness.

THE BASICS

ABV 7.3%

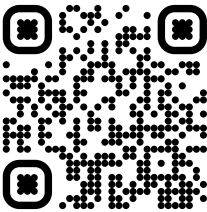
IBU 100.0

OG (SG) 15.8°P (1.065)

FG (SG) 2.2°P (1.009)

EBC (SRM) 10.0 (5.0)

pH 4.6



ADD A GLIMMER OF
ELLA™ TO YOUR CAN ART

Ella has unique tropical flavours like papaya, mango, pineapple and lychee, that are like nothing else. It's a great hop that adds a lot of complexity to beer.

STEVE GONZALEZ,
STONE BREWING

INGREDIENTS KG/10HL LB/10BBL

Malt

Pale 220 575

Honey 9 23

Acidulated 9 23

Hops

Super Pride T90 0.3 0.8 First wort

Galaxy® T90 0.6 1.7 Kettle 30min remaining

Ella™ T90 0.6 1.7 Kettle 30min remaining

Galaxy® T90 1.0 2.5 Kettle 15min remaining

Vic Secret™ T90 1.0 2.5 Kettle 15min remaining

Galaxy® T90 1.3 3.3 Whirlpool

Vic Secret™ T90 1.3 3.3 Whirlpool

Ella™ T90 1.3 3.3 Whirlpool

Vic Secret™ T90 3.5 9.2 Dry hop When VDK negative and tank chilled to 16°C (62°F)

Ella™ T90 3.5 9.2 Dry hop When VDK negative and tank chilled to 16°C (62°F)

Ella™ T90 6.0 15.5 End of ferment

Yeast

California Ale

METHOD + TIMINGS °C °F DETAILS

Mash 67 152 Mash in at temperature, rest for 30min
78 172 Rapidly raise to temperature, mash out immediately

Boil 60-90min

Knockout 20 68

Fermentation 22 72 5-6 days, free rise to temperature after 48hr

Diacetyl Rest 22 72 2+ days at temperature until VDK negative

Chill 0 32 5-7 days at temperature, yeast off no later than 7 days after



Porter

THE BEER

Floral on the nose; coffee, chocolate and toffee on the palate; balanced with a low clean bitterness.

THE BASICS

ABV 6.0%

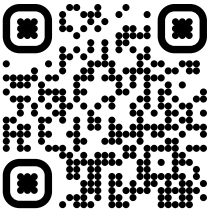
IBU 40.0

OG (SG) 15.0°P (1.061)

FG (SG) 4.0°P (1.016)

EBC (SRM) 67.0 (34.0)

pH 4.2



ADD A GLIMMER OF
ELLA™ TO YOUR CAN ART



INGREDIENTS KG/10HL LB/10BBL

Malt

Maris Otter 220 570

Crystal 19 50

Dark Crystal 11 29

Carafa Special II 11 29

Chocolate 8 21

Hops

Chinook T90 0.4 1.0 First wort

Ella™ T90 0.4 1.0 First wort

Ella™ T90 0.9 2.4 Start of whirlpool Post ferment, remove after 5 days

Yeast

US-05 Ale

METHOD + TIMINGS °C °F DETAILS

Mash 67 153 Mash in at temperature, rest for 25min
78 172 Rapidly raise to temperature, mash out immediately

Boil 60-90min

Knockout 20 68

Fermentation 20 68 5-7 days at temperature

Diacetyl rest 2+ days at temperature until VDK negative

Chill 0 32 5-7 days at temperature, after 2 days crash tank and yeast off

Ella is a fantastic hop for dark beers. A lower dose in the whirlpool imparts awesome floral and spice attributes that blend well with heavier and darker malt bills.

HENRY TANNER, SHAMBLES BREWERY



CRACK THE CODE WITH AUSTRALIA'S

ENIGMA[®]

WHITE GRAPE, REDCURRANT & ROCKMELON

Aussie hops are great! We love the classic tropical fruit vibes for which Galaxy has become famous, but there are also some sleepers in the mix that shouldn't be overlooked. Enigma has the ability to drive different characters depending on where and when you use it, adding great complexity to fruity notes.

JACK VINEY, MOO BREW





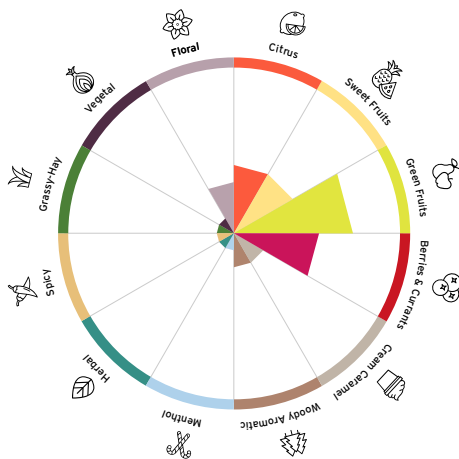
Origin story

Enigma® 02-016-008 c.v. was created by HPA's hop breeding program in 2002 through open pollination from a seedlot listed as Swiss Tett nang. This suggests a European origin, but the genetic fingerprint of Enigma® tells a different story that is more closely aligned with a North American origin.

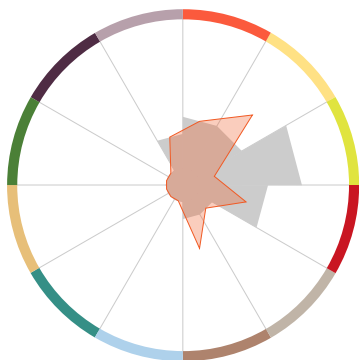
Early brewing trials highlighted white grape and red berry flavours, which provided incentive for HPA to propagate, deploy, and eventually commercialise Enigma® in 2015. Being particularly sensitive to daylength, Enigma® is only grown in Tasmania. It thrives in the warm and dry summer conditions, with cool and wet seasons sometime causing slow emergence, limited growth, and low yields.

Different aspects of the Enigma® white grape, tart redcurrant, and sweet rockmelon (otherwise known as cantaloupe) flavour profile shine depending on dose rate and addition time, with late additions or dry hopping enhancing the flavour and aroma outcomes.

Beer sensory



Raw hop sensory



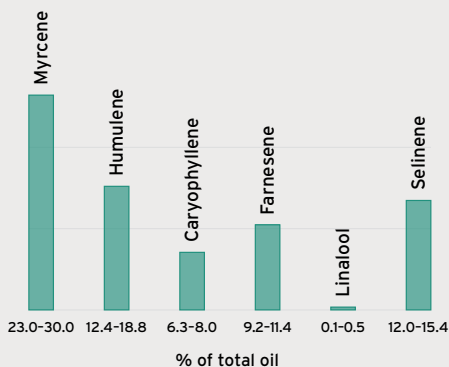
Analytical data

Alpha 17.9 - 19.5% **Beta** 6.7 - 7.6%

Cohumulone 37.0 - 43.0% of α -acids

Total oil 3.0 - 3.7ml/100g

Hop oil composition



Recommended beer styles

IPL, Pale Ale, Summer Ale, IPA, Sour

IPL

THE BEER

Clean, crisp flavours of white grape, raspberry, redcurrant and rockmelon with a moderately bitter and seriously refreshing finish.

THE BASICS

ABV 5.5%

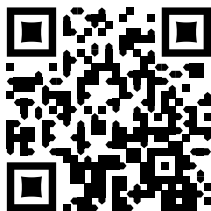
IBU 30.0

OG (SG) 13.0°P (1.053)

FG (SG) 2.8°P (1.011)

EBC (SRM) 14.0 (7.0)

pH 4.2



ADD A HINT OF ENIGMA®
TO YOUR CAN ART



INGREDIENTS KG/10HL LB/10BBL

Malt

Pale 165 405

Munich I 35 88

Light Crystal 7 18

Wheat 15 35

Hops

Enigma® T90 1.4 3.5 Whirlpool

Enigma® T90 3.6 17.6 Dry hop Day 7 of ferment, post free rise

Centennial T90 0.7 10.6 Dry hop Day 7 of ferment, post free rise

Yeast

Saflager W-34/70

METHOD + TIMINGS °C °F DETAILS

Mash 60 140 Mash in at temperature, saccharification rest for 60min

78 172 Rapidly raise to temperature, mash out immediately

Boil 60-90min

Knockout 20 68

Fermentation 20 68 5-7 days at temperature

Diacetyl rest 20 68 2+ days at temperature until VDK negative

Chill 0 32 7-14 days at temperature, yeast off no later than 48hr after

Enigma is versatile enough to be thrown in the whirlpool and the fermenter to great effect. Late whirlpool addition will help ensure minimal bitterness when using large quantities on the hot side.

TOM WOOD, MISMATCH BREWING



Hazy Pale

THE BEER

Mild body, smooth bitterness, and a strong hoppy kick of grapefruit, pineapple & rockmelon.

THE BASICS

ABV 4.5%

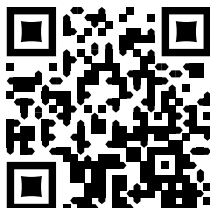
IBU 20.0

OG 11.5°P
(SG) (1.046)

FG 3.2°P
(SG) (1.013)

EBC 7.0
(SRM) (4.0)

pH 4.4



ADD A HINT OF ENIGMA®
TO YOUR CAN ART



INGREDIENTS

KG/10HL

LB/10BBL

Malt

Pale 165 425

Flaked Oats 47 122

Hops

Enigma® T90 0.9 2.4 Flameout

Galaxy® T90 0.9 2.4 Flameout

Enigma® T90 1.6 4.0 Day 5 of ferment

Galaxy® T90 1.6 4.0 Day 5 of ferment

Enigma® T90 1.6 4.0 Day 5 of ferment

Galaxy® T90 3.1 8.1 Day 14 of ferment

Yeast

English Ale

METHOD + TIMINGS

°C

°F

DETAILS

Mash 66 151 Mash in at temperature, saccharification rest for 60min

78 172 Rapidly raise to temperature, mash out immediately

Boil 60-90min

Knockout 20 68

Fermentation 22 72 1-4 days, free rise to temperature

Diacetyl Rest 22 72 10 days, removing sediment daily from day 6

Step Chill 16 61 1 day

Crash 0 32 24hr after step chill, trub off and yeast off daily

Maturation 0 32 2 days if centrifuging or 7-10 days and 2-3 days in BBT

If you think about hop additions like a team sport, Enigma would have the league record for assists. When used heavily in late-addition dry hopping, Enigma helps accentuate stronger-flavoured hops and fill the mouthfeel while maintaining drinkability.

GEORGE MACGREGOR, AETHER BREWING



IPA

THE BEER

Upfront aromas of stone fruit, melon and pinot gris, backed up by moderate malt sweetness and hop bitterness.

THE BASICS

ABV 6.5%

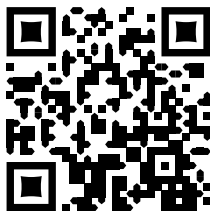
IBU 60.0

OG (SG) 16.0°P (1.065)

FG (SG) 4.0°P (1.016)

EBC (SRM) 13.0 (6.5)

pH 4.3



ADD A HINT OF ENIGMA®
TO YOUR CAN ART



INGREDIENTS

Malt

Pale Ale	275	710
Munich II	63	160
Rolled Barley	31	80
Carahell	12	32

Hops

Warrior® T90	0.3	0.8	Kettle	60min remaining
Enigma® T90	2.0	5.2	Whirlpool	
Citra® T90	2.0	5.2	Whirlpool	
Amarillo® T90	0.8	2.1	Whirlpool	
Enigma® T90	5.5	14.2	Dry hop	Day 5 of ferment
Enigma® SPECTRUM	0.5	1.3	Dry hop	Day 5 of ferment
Citra® T90	3.0	7.8	Dry hop	Day 5 of ferment
Amarillo® T90	1.7	4.4	Dry hop	Day 5 of ferment

Yeast

AY-4 Ale

METHOD + TIMINGS

	°C	°F	DETAILS
Mash	67	153	Mash in at temperature, saccharification rest for 60min
	78	172	Rapidly raise to temperature, mash out immediately
Boil			60-90min
Knockout	16	61	
Fermentation	20	68	5-7 days at temperature
Diacyl rest	20	68	2+ days at temperature until VDK negative
Chill	0	32	7-14 days at temperature, yeast off no later than 48hr after

A big dose of dry hop using a combo of T90s and SPECTRUM really makes the rockmelon and white grape flavours of Enigma shine.

BRENTON SCHOEMAKER, KICK BACK BREWING



REACH FOR THE STARS WITH AUSTRALIA'S

GALAXY

PASSIONFRUIT, PEACH & CITRUS



We love showcasing the incredible ingredients that are uniquely grown in our little corner of the world. Very proud to be one of the first breweries to use and showcase Galaxy in a beer that differed from the trends at the time. The growth and success of Pacific Ale would not have been possible without the fundamental ingredient, Galaxy. Those passionfruit flavours helped change Aussie drinkers perspective of how beer can taste.

CAOLAN VAUGHAN, STONE & WOOD BREWING CO



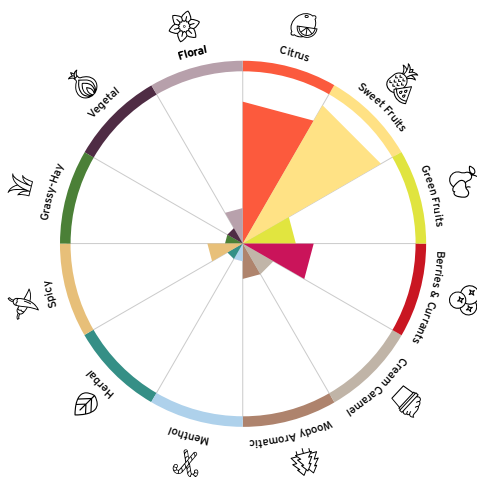
Origin story

Galaxy® 94-203-008 c.v. was created by HPA in 1994 through a cross-pollination of high alpha Australian and Perle parents. Back then, our breeding program was focused on maximum alpha and consistent yield. It wasn't until 1997 that Galaxy® became a front runner of the experimental cohort.

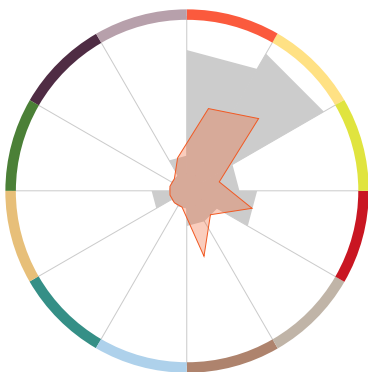
Carlton United Breweries conducted the very first brewing trials in 2003, after which a large plot was established in both Victoria and Tasmania. The name Galaxy® first appeared in 2005, when samples were distributed to Tooheys and 100 US craft brewers, including Crux Fermentation Project. Their feedback led HPA to redefine the future potential of Galaxy®, focus solely on flavour impact, and radically expand its acreage.

Galaxy® was commercialised in 2009, before going on to become an integral part of Australian craft brewing. That same year, Stone & Wood launched their Draught Ale, a cloudy golden ale that took Byron Bay by storm. It would eventually become Pacific Ale, a style-defining Australian craft beer icon made with 100% Galaxy®. Since then, Galaxy® has become HPA's biggest hop, making up more than 60% of their total crop. It is the most recognised Aussie hop around the world due to its distinctively punchy passionfruit, juicy peach and tangy citrus characteristics.

Beer sensory



Raw hop sensory



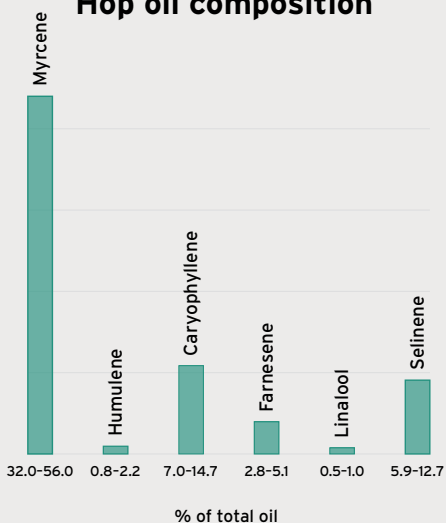
Analytical data

Alpha 15.9 - 19.8% **Beta** 7.8 - 9.9%

Cohumulone 32.0 - 43.0% of α -acids

Total oil 2.6 - 3.3ml/100g

Hop oil composition



Recommended beer styles

XPA, Pacific Ale, Hazy Pale, IPA, NEIPA

Galaxy® is also available in
SPECTRUM
 the next generation of
 liquid dry hopping



Strong Hazy Pale

THE BEER

Aromas of tropical stone fruit and a juicy life force that holds the bitterness at bay for a full body finish.

THE BASICS

ABV 6.0%

IBU 20.0

OG (SG) 14.0°P (1.057)

FG (SG) 3.0°P (1.012)

EBC (SRM) 12.0 (6.0)

pH 4.2



ADD A SPECK OF GALAXY®
TO YOUR CAN ART



INGREDIENTS KG/10HL LB/10BBL

Malt

Pilsner 23 60

Pale 65 170

Wheat 70 180

Malted Oats 70 180

Carared 12 30

Munich I 12 30

Hops

Galaxy® T90 1.0 2.6 Dry hop Day 1 of ferment

Vic Secret™ T90 0.4 1.0 Dry hop Day 1 of ferment

BRU-1™ T90 0.4 1.0 Dry hop Day 1 of ferment

Yeast

1056 Ale

METHOD + TIMINGS °C °F DETAILS

Mash 55 131 Mash in at temperature, protein rest for 20min

73 163 Raise to temperature, saccharification rest for 30min

78 172 Raise to temperature, mash out immediately

Boil 60-90min

Knockout 20 68

Fermentation 22 72 4-5 days at temperature

Diacetyl rest 22 72 3 days at temperature until VDK negative

Chill 0 32 5-10 days at temperature, yeast off no later than 48hr after chill

Mash high to achieve full-bodied flavour and mouthfeel, and dry hop at start of fermentation to promote a stable haze.

CAOLAN VAUGHAN, STONE & WOOD BREWING CO.



American IPA

THE BEER

A simple American IPA to showcase the passionfruit, peach and citrus flavours and aromas of Galaxy® when added at every stage of the brewing process.

THE BASICS

ABV 6.1%

IBU 62.0

OG (SG) 14.0°P (1.057)

FG (SG) 2.8°P (1.011)

EBC (SRM) 10.0 (5.0)

pH 4.3



ADD A SPECK OF GALAXY®
TO YOUR CAN ART



INGREDIENTS KG/10HL LB/10BBL

Malt

Ale 232 600

Hops

Galaxy® T90 0.5 1.3 Mash in

Galaxy® T90 0.2 0.5 First wort

Galaxy® T90 0.2 0.4 Kettle 30min remaining

Galaxy® T90 0.2 0.4 Kettle 20min remaining

Galaxy® T90 0.2 0.4 Kettle 10min remaining

Galaxy® T90 0.2 0.4 Kettle End of boil

Galaxy® T90 1.5 3.9 Whirlpool

Galaxy® T90 0.5 1.3 Hopback

Galaxy® T90 2.0 5.2 Dry hop Knockout

Galaxy® SPECTRUM 0.5 1.3 Dry hop Day 3 of ferment

Galaxy® T90 5.0 12.9 Dry hop Post ferment, remove after 5 days

Yeast

US-05

METHOD + TIMINGS °C °F DETAILS

Mash 66 151 Mash in at temperature, rest for 60min

78 172 Raise to temperature, mash out immediately

Boil 60-90min

Knockout 20 68

Fermentation 22 72 5-7 days at temperature

Diacetyl Rest 22 72 3 days at temperature until VDK negative

Chill 0 32 7-10 days at temperature, yeast off after 24hr

We keep bittering additions modest when using high-cohumulone hops. Galaxy additions at the end of ferment are great for building stable haze.

BEN JOHNSON, BIG SHED BREWING



Cold IPA

THE BEER

Astronomic passionfruit, tropical fruit and citrus fruit, followed by more restrained floral and red berry vibes.

THE BASICS

ABV 6.8%

IBU 40.0

OG (SG) 15.0°P (1.061)

FG (SG) 2.2°P (1.008)

EBC (SRM) 10.0 (5.0)

pH 4.3



ADD A SPECK OF GALAXY®
TO YOUR CAN ART



INGREDIENTS KG/10HL LB/10BBL

Malt

Pilsner 250 650

Munich I 20 50

Hops

Galaxy® SPECTRUM 0.8 2.1 Dry hop Day 1 of ferment

Mosaic® SPECTRUM 0.4 1.0 Dry hop Day 1 of ferment

Galaxy® T90 4.0 10.3 Dry hop Day 7 of ferment

Mosaic® LUPOMAX® 2.0 5.2 Dry hop Day 7 of ferment

Yeast

S23 Lager

METHOD + TIMINGS °C °F DETAILS

Mash 66 151 Mash in at temperature, saccharification rest for 60min

78 172 Rapidly raise to temperature, mash out immediately

Boil 60-90min

Knockout 16 61

Fermentation 18 65 7-10 days at temperature

Diacytyl Rest 20 68 Free rise to temperature, rest for 2+ days until VDK negative

Lagering 0 32 7-21 days at temperature, yeast off no later than 48hr after chill



When brewing with Aussie hops, especially in this style of beer which has a very lean malt profile, err on the side of caution when it comes to hop intensity to avoid some harsher characters coming through.

JAMES DITTKO, BRIDGE ROAD BREWERS





Shine bright with Australia's

Topaz™

Lychee & Tropical Fruit

Aussie hops excel across the entire brewery. High alpha varieties like Topaz have bittering additions covered. High oil contents and excellent flavour stability carry through well from late kettle additions. As for the cold side – the unique sensory profiles keep us literally spoiled for choice. Because Aussie varietals carry unique “tropical fruity” notes, we’re afforded infinite creative flexibility to craft wildly drinkable beers.

GEORGE MACGREGOR, AETHER BREWING

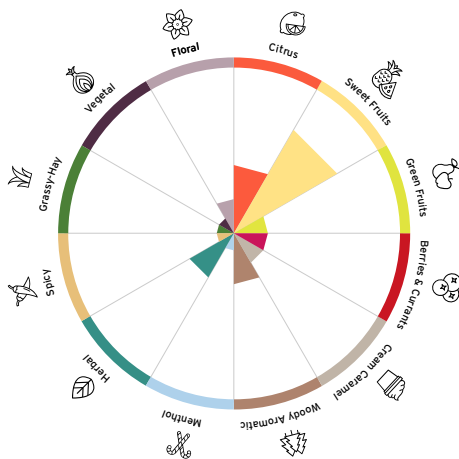


Origin story

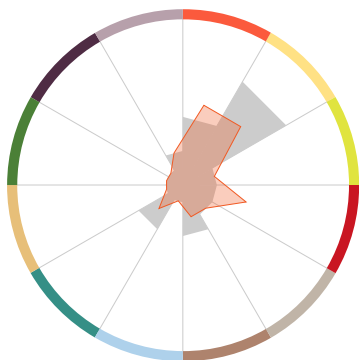
Topaz™ TC-85-70 c.v. was created by HPA's hop breeding program in 1985 through a cross-pollination of the mother of Galaxy® and a male genotype from Wye College, which provides an interesting mix of English, European and North American ancestry. Originally selected for its insanely high alpha acid content, Topaz™ was commercialised in 1997 and predominantly sold into the extract market.

Unexpectedly, dried hop cones presented for sensory analysis at trade shows repeatedly received positive feedback from brewers, prompting investigation into the flavour potential of Topaz™. Now, craft brewers regularly use early additions for a pleasant bitterness and late in large doses for more exotic lychee and lighter tropical fruit flavours that really shine in a sessional setting.

Beer sensory



Raw hop sensory



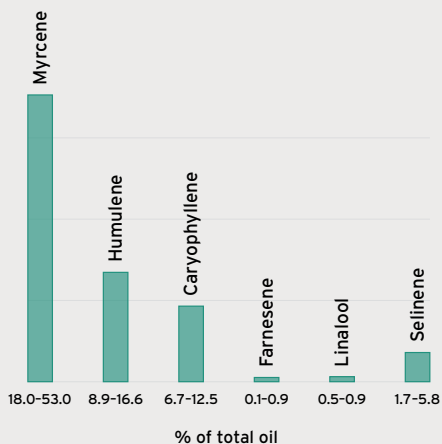
Analytical data

Alpha 17.9 - 20.6% **Beta** 5.5 - 7.0%

Cohumulone 47.0 - 53.0% of α -acids

Total oil 1.6 - 2.0ml/100g

Hop oil composition



Recommended beer styles

IPL, Amber Ale, XPA, Wheat, ESB

IPL

THE BEER

CAUTION: Super crisp orange peel and grapefruit flavours that will give you the unbearable urge to mow the lawn on a scorching Saturday arvo.

THE BASICS

ABV 5.8%

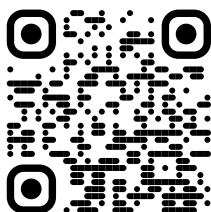
IBU 30.0

OG (SG) 13.3°P (1.054)

FG (SG) 2.8°P (1.011)

EBC (SRM) 5.0 (3.0)

pH 4.2



ADD A RAY OF TOPAZ™
TO YOUR CAN ART

INGREDIENTS KG/10HL LB/10BBL

Malt

Pale 200 517

Carapils 25 65

Malted Oats 25 65

Hops

Topaz™ T90 0.2 0.4 First wort

Topaz™ T90 1.5 3.9 Whirlpool

Topaz™ T90 3.5 9.0 Dry hop When VDK negative, 48hr after free rise

Galaxy® T90 2.5 6.5 Dry hop When VDK negative, 48hr after free rise

Yeast

WLP1983

METHOD + TIMINGS °C °F DETAILS

Mash 55 131 Mash in at temperature, rest for 10min
66 151 Raise to temperature, rest for 10min
72 162 Raise to temperature, rest for 5min
78 172 Rapidly raise to temperature, mash out immediately

Boil 60-90min

Knockout 16 61

Fermentation 18 65 5-7 days at temperature

Diacetyl Rest 18 65 2+ days at temperature until VDK negative

Chill 0 32 7-14 days at temperature, centrifuge bright



Topaz is a misunderstood hop. It's easily pigeonholed as a bittering hop thanks to its high alpha content, but it can also outcompete other hero hops in the dry hop at a smaller ratio. I describe it as more refined within the citrus space.

It's unique and fantastic.

JESSE SEARLS, YOUNG HENRYS BREWERY



XPA

THE BEER

Delicate fruity flavours on a lean malt bed with a deliciously crisp bitterness.

THE BASICS

ABV 4.7%

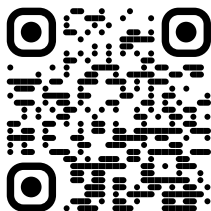
IBU 23.0

OG (SG) 10.8°P (1.043)

FG (SG) 2.0°P (1.008)

EBC (SRM) 6.6 (3.4)

pH 4.2



ADD A RAY OF TOPAZ™
TO YOUR CAN ART



INGREDIENTS	KG/10HL	LB/10BBL		
Malt				
Pale	180	465		
Wheat	10	25		
Chit	10	25		
Hops				
Vic Secret™ T90	1.5	3.8	Whirlpool	Chill wort to <85°C (<185°F)
Topaz™ T90	1.0	2.6	Dry hop	Day 4 of ferment
Vic Secret™ T90	1.0	2.6	Dry hop	Day 4 of ferment
Topaz™ T90	1.5	3.9	Dry hop	Day 7 of ferment
Vic Secret™ T90	1.5	3.9	Dry hop	Day 7 of ferment
Yeast				
Cali Ale				

METHOD + TIMINGS	°C	°F	DETAILS
Mash	65	149	Mash in at temperature, rest for 45min
	78	172	Raise to temperature, mash out immediately
Boil			60-90min
Knockout	18	65	
Fermentation	20	68	7-8 days at temperature
Diacetyl Rest	22	72	2+ days at temperature until VDK negative
Chill	0	32	Remove hops, yeast of daily 24hr after chill, age 7-10 days at temperature

I love how impactful Aussie hops are in our beers! Topaz in particular is very unique. It's quite high alpha so I try to use it predominantly as a dry hop or sparingly in the whirlpool where it throws up beautifully delicate stone fruit and lychee aromas that work oh so well in XPAs, Summer Ales, and Hazy Pales.

MATT CUTHBERT, REVEL BREWING CO

American Wheat

THE BEER

A dry, clean and crisp beer with lychee and tropical fruit top notes.

THE BASICS

ABV 4.5%

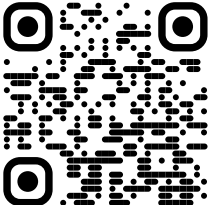
IBU 20.0

OG (SG) 10.2°P (1.041)

FG (SG) 1.7°P (1.007)

EBC (SRM) 5.0 (3.0)

pH 4.2



ADD A RAY OF TOPAZ™
TO YOUR CAN ART

INGREDIENTS KG/10HL LB/10BBL

Malt

Pils 130 335

Wheat 55 145

Hops

Topaz™ T90 0.3 0.8 Kettle 60min remaining

Magnum T90 0.5 1.2 Whirlpool

Topaz™ T90 0.8 1.9 Dry hop When SG hits 3°P

Yeast

Nottingham

METHOD + TIMINGS °C °F DETAILS

Mash 63 146 Mash in at temperature, rest for 30min

73 164 Raise to temperature, rest for 10min

78 172 Raise to temperature, mash out immediately

Boil 60-90min

Knockout 18 65

Fermentation 18 65 5-7 days at temperature

Diacetyl Rest 18 65 2+ days at temperature until VDK negative

Chill 0 32 Yeast off no later than 48hr after chill



Topaz is super subtle and delicate, so works great in beers that aren't your standard hop forward double dry hopped bombs, though it also has a place there as an additon to add some depth to the aroma. Add Topaz late for more lychee and sweet fruit aromatics in finished beer.

JACK VINEY, MOO BREW

**MOO
BREW**





Discover Australia's
VIC SECRET™
Pineapple & Pine

Vic Secret is a great addition to any dry hop bill as it helps blend and support the other hops, giving the beer a more complete hop aroma and flavour.

HENRY TANNER, SHAMBLES BREWERY





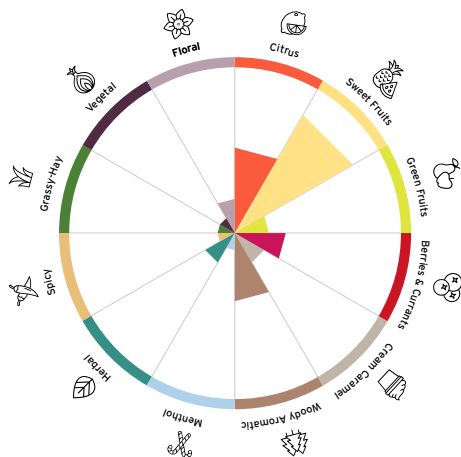
Origin story

Vic Secret™ 00-207-013 c.v. was created by HPA's breeding program in 2000 through a cross-pollination of high alpha Australian and Wye College parents, whose ancestry is an interesting mix of English, European and North American heritage.

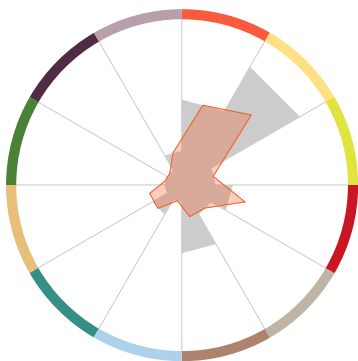
Despite having high yield potential, Vic Secret™ was destined for the chopping block until it featured in neighbour Bridge Road Brewers' Harvest Ale in 2011, which tapped into the huge flavour potential of Vic Secret™. Always a favourite among HPA's Victorian farmers as a good hop to grow, this confirmation of impact in beer was all it took for Vic Secret™ to advance from the experimental cohort.

The unsung Aussie hero was commercialised in 2013. Since then, its big pineapple and big pine flavours have been known to play well on their own, as well as with other hops. It can help to accentuate pine and dankness in darker hop forward beers, and emphasise tropical fruit characteristics in lighter hop forward beers. On the hot side this surprise package offers spicy notes, while on the cold side it bursts with amazing aromatics.

Beer sensory



Raw hop sensory



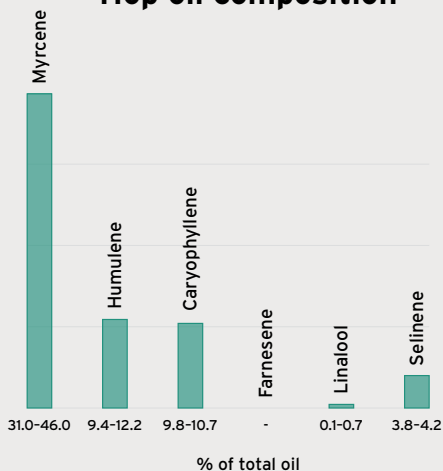
Analytical data

Alpha 18.4 - 21.6% **Beta** 6.3 - 7.8%

Cohumulone 51.0 - 56.0% of α -acids

Total oil 2.1 - 2.9ml/100g

Hop oil composition



Recommended beer styles

Lager, XPA, Hazy Pale, IPA, WCIPA

Vic Secret™ is also available in
SPECTRUM
 the next generation of
 liquid dry hopping



Lager

THE BEER

Light malt and low bitterness with a big dose of dry hops to accentuate the pineapple and pine characters.

THE BASICS

ABV 5.0%

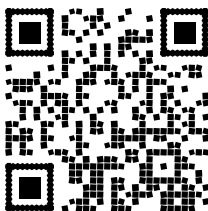
IBU 20.0

OG (SG) 11.4°P (1.046)

FG (SG) 2.1°P (1.008)

EBC (SRM) 9.0 (4.5)

pH 4.4



ADD A BIT OF VIC SECRET™
TO YOUR CAN ART



INGREDIENTS KG/10HL LB/10BBL

Malt

Pilsner 200 520

Munich I 6 15

Carapils 6 15

Hops

Vic Secret™ T90 2.5 6.5 Whirlpool

Vic Secret™ T90 3.6 9.3 Dry hop Day 6 of ferment, post free rise

Cascade T90 0.7 1.8 Dry hop Day 6 of ferment, post free rise

Vic Secret™ T90 5.0 12.9 Dry hop Day 11, post ferment during step chill

Yeast

Diamond Lager

METHOD + TIMINGS °C °F DETAILS

Mash 66 151 Mash in at temperature, saccharification rest for 35min
78 172 Rapidly raise to temperature, mash out immediately

Boil 60-90min

Knockout 10 50

Fermentation 17 63 4 days, free rise to temperature

Diacetyl Rest 17 63 2+ days until VDK negative

Chill 10 50 1 day at temperature, yeast off no later than 48hr after

8 46 1 day at temperature

4 39 1 day at temperature

0 32 1 day at temperature

Lagering 0 32 42 days at temperature

Late kettle additions of Vic Secret promote pine and dankness in darker hop forward beers, and emphasise tropical fruit characteristics in lighter hop forward beers.

HENRY TANNER, SHAMBLES BREWERY



WCIPA

THE BEER

Big pine and big pineapple all the way with ferocious tropical notes and a full fruit bowl flavour.

THE BASICS

ABV 6.8%

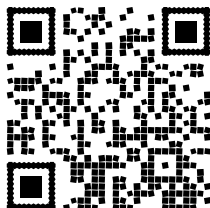
IBU 46.0

OG (SG) 15.3°P (1.062)

FG (SG) 2.8°P (1.011)

EBC (SRM) 10.0 (5.0)

pH 4.0



ADD A BIT OF VIC SECRET™
TO YOUR CAN ART



INGREDIENTS	KG/10HL	LB/10BBL	
Malt			
Pale	275	675	
Hops			
Vic Secret™ T90	0.5	0.7	Mash in
Vic Secret™ T90	0.1	0.1	First wort
Vic Secret™ T90	1.0	1.3	Whirlpool
Vic Secret™ T90	15.0	33.0	Dry hop Post ferment, remove after 5 days
Yeast			
London Ale III			

METHOD + TIMINGS	°C	°F	DETAILS
Mash	55	131	Mash in at temperature
	64	147	Raise to temperature, saccharification rest for 40min
	72	162	Raise to temperature, saccharification rest for 20min
	78	172	Rapidly raise to temperature, mash out immediately
Boil			60-90min
Knockout	18	65	
Fermentation	22	72	Free rise to temperature
Diacetyl Rest	22	72	3+ days until VDK negative
Chill	15	59	5 days at temperature
	0	32	7-10 days at temperature, yeast off daily from 24 hours after chill

Vic Secret is strong and punchy, so removing as much particulate as you can before packaging will help give a crisp clean finish.

CURTIS UHRYN, DEEDS BREWING



Saison

THE BEER

Dank and refreshing pineapple and pine resin.

THE BASICS

ABV 5.9%

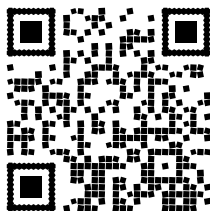
IBU 28.0

OG (SG) 12.5°P (1.051)

FG (SG) 1.3°P (1.005)

EBC (SRM) 7.5 (3.6)

pH 4.0



ADD A BIT OF VIC SECRET™
TO YOUR CAN ART



INGREDIENTS KG/10HL LB/10BBL

Malt

Belgian Pils 227 597

Pale Munich 9 23

Flaked Wheat 9 23

Acidulated 6 16

Hops

Vic Secret™ T90 0.1 0.2 First wort

Vic Secret™ T90 1.1 1.9 Whirlpool Cool wort under 88°C (190°F) before addition

Vic Secret™ T90 3.2 8.5 Dry hop Day 7 of ferment

Yeast

Belle

METHOD + TIMINGS °C °F DETAILS

Mash 67 152 Mash in at temperature, rest for 45min

77 170 Raise to temperature, mash out immediately

Boil 60-90min

Knockout 19 66

Fermentation 27 80 Free rise to temperature, rest for ~7 days

Age 27 80 Slurry 0.3kg/10hl (0.6lb/10bbl) yeast in water or beer and rouse into blending tank.
Dissolve 7.4kg/10hl (19.4lb/10bbl) sugar in hot water, rouse into blending tank, recirculate.
Seal tank ~72hr after dry hop, build pressure to 5-10 psi, age for ~2 weeks on dry hops.

Soft crash 13 55 Remove yeast and hops 48hr after

Conditioning 22 72 3-4 weeks at room temperature

Chill 0 32 At least 48hr before serving

Vic Secret adds some really beautiful overripe or spicy pineapple and dank pine elements. Like many Aussie hops, it's an oil content monster. I've actually found I can use 10-20% less than its Yakima Valley counterparts.

ZACH NICHOLS, CELLAR WEST BREWERY







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