

#TO DO#WincyjJBÓW!!!!111

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **109**
- SRM **5.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **25.9 liter(s)**

Steps

- Temp **69 C**, Time **80 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **80 min** at **69C**
- Keep mash **5 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	4 kg (66.7%)	80.5 %	6
Grain	Briess - Vienna Malt	1 kg (16.7%)	77.5 %	7
Grain	Carahell	0.5 kg (8.3%)	77 %	26
Sugar	Cukier	0.25 kg (4.2%)	100 %	1
Grain	Weyermann - Acidulated Malt	0.25 kg (4.2%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Columbus/Tomahawk/Zeus	20 g	70 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	20 g	50 min	15.5 %
Boil	Centennial	25 g	30 min	10.5 %
Boil	Centennial	10 g	20 min	10.5 %
Boil	Centennial	10 g	10 min	10.5 %
Boil	Citra	25 g	10 min	12 %
Boil	Centennial	5 g	5 min	10.5 %
Boil	Citra	25 g	5 min	12 %
Boil	Columbus/Tomahawk/Zeus	10 g	1 min	15.5 %

Boil	Citra	25 g	1 min	12 %
Dry Hop	Citra	75 g	3 day(s)	12 %
Dry Hop	Centennial	50 g	3 day(s)	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	120 ml	Safale

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	4 g	Mash	70 min
Fining	Whirlfloc	2 g	Boil	10 min