

jesienna nostalgia

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **46**
- SRM **9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.7 liter(s)**
- Total mash volume **31.6 liter(s)**

Steps

- Temp **55 C**, Time **15 min**
- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **23.7 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	6 kg (74.1%)	78 %	6
Grain	Briess - Wheat Malt, Red	0.5 kg (6.2%)	81 %	5
Grain	Victory Malt	0.5 kg (6.2%)	73 %	49
Grain	Caramel/Crystal Malt - 60L	0.4 kg (4.9%)	74 %	118
Grain	Briess - Rye Malt	0.5 kg (6.2%)	80 %	7
Adjunct	Rice Hulls	0.2 kg (2.5%)	1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	20 g	60 min	15.5 %
Boil	Azacca	5 g	15 min	10.6 %
Boil	Centennial	5 g	15 min	7.3 %
Boil	Amarillo	5 g	15 min	8 %
Boil	Cascade	5 g	15 min	4 %
Boil	Azacca	10 g	10 min	10.6 %
Boil	Centennial	10 g	10 min	7.3 %

Boil	Amarillo	10 g	10 min	8 %
Boil	Cascade	10 g	10 min	4 %
Boil	Azacca	15 g	5 min	10.6 %
Boil	Centennial	15 g	5 min	7.3 %
Boil	Amarillo	15 g	5 min	8 %
Boil	Cascade	15 g	5 min	4 %
Dry Hop	Azacca	25 g	3 day(s)	10.6 %
Dry Hop	Centennial	25 g	3 day(s)	7.3 %
Dry Hop	Amarillo	25 g	3 day(s)	8 %
Dry Hop	Cascade	25 g	3 day(s)	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M07 British Ale	Ale	Dry	10 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Fining	irish moss	1 g	Boil	15 min
Water Agent	gypsum	5 g	Mash	0 min