

Nowoangielskie

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **14**
- SRM **4.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.36 kg (58.8%)	80 %	5
Grain	Viking Pilsner malt	1.05 kg (18.4%)	82 %	4
Grain	Viking Wheat Malt	0.5 kg (8.8%)	83 %	5
Grain	Oats, Flaked	0.8 kg (14%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	10 min	15.8 %
Boil	Ekuanot	15 g	5 min	16.1 %
Boil	Columbus/Tomahawk/Zeus	10 g	1 min	15.8 %
Aroma (end of boil)	Mosaic	50 g	0 min	10 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	25 g	0 min	15.8 %
Whirlpool	Ekuanot	45 g	0 min	16.1 %
Dry Hop	Columbus/Tomahawk/Zeus	50 g	10 day(s)	15.5 %
Dry Hop	Galaxy	50 g	10 day(s)	15 %
Dry Hop	Columbus/Tomahawk/Zeus	50 g	3 day(s)	15.5 %
Dry Hop	Mosaic	50 g	3 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale III	Ale	Liquid	30 ml	Wyeast Labs