

BZIONEK

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **41**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **1500 liter(s)**
- Trub loss **5 %**
- Size with trub loss **1575 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **1811.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **1110 liter(s)**
- Total mash volume **1480 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **1110 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **1071.3 liter(s)** of **76C** water or to achieve **1811.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	175 kg (47.3%)	80 %	5
Grain	Viking Pilsner malt	150 kg (40.5%)	82 %	4
Grain	Carahell	25 kg (6.8%)	77 %	26
Grain	Viking Wheat Malt	20 kg (5.4%)	83 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	180 g	60 min	10 %
Boil	Ekuanot	110 g	60 min	13 %
Boil	Mosaic	150 g	50 min	10 %
Boil	ekuanot	115 g	50 min	13 %
Boil	Mosaic	140 g	45 min	10 %
Boil	ekuanot	120 g	45 min	13 %
Boil	Simcoe	200 g	25 min	13.2 %
Boil	Mosaic	150 g	25 min	10 %
Boil	ekuanot	150 g	25 min	13 %
Boil	Simcoe	150 g	5 min	13.2 %

Boil	Mosaic	150 g	5 min	10 %
Boil	ekuanot	150 g	5 min	13 %
Aroma (end of boil)	Mosaic	1000 g	20 min	10 %
Aroma (end of boil)	ekuanot	1000 g	20 min	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	950 g	---