

IPA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **38**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **9.6 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.3 kg (71.9%)	80 %	5
Grain	Weyermann pszeniczny jasny	0.5 kg (15.6%)	80 %	6
Grain	Płatki owsiane	0.4 kg (12.5%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	10 g	10 min	15 %
Aroma (end of boil)	Galaxy	30 g	10 min	15 %
Dry Hop	Galaxy	45 g	3 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	20 ml	Fermentum Mobile