

i.p.a 12l

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **48**
- SRM **6.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.4 liter(s)**
- Total mash volume **12.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **9.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.64 kg (84%)	80 %	5
Grain	Strzegom Pszeniczny	0.38 kg (12.2%)	81 %	6
Grain	Strzegom Karmel 150	0.12 kg (3.8%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	ekuanot	9.6 g	60 min	13.1 %
Boil	ekuanot	12 g	15 min	13.1 %
Boil	ekuanot	19.2 g	5 min	13.1 %
Boil	ekuanot	28.8 g	1 min	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5.28 g	---