

kwiatowa ipa dzielone na dwa

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **30**
- SRM **7.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **55 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **66 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36.3 liter(s)**
- Total mash volume **48.4 liter(s)**

Steps

- Temp **38 C**, Time **0 min**
- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **36.3 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **0 min** at **38C**
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **41.8 liter(s)** of **76C** water or to achieve **66 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Munich Malt	2 kg (16.5%)	78 %	18
Grain	vikiing colorado pale ale	5 kg (41.3%)	78 %	5
Grain	viking colorado honig	5 kg (41.3%)	78 %	15
Grain	Strzegom Karmel 600	0.1 kg (0.8%)	68 %	600

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Smaragd	15 g	15 min	3.9 %
Aroma (end of boil)	Smaragd	15 g	10 min	3.9 %
Aroma (end of boil)	Smaragd	15 g	5 min	3.9 %
Aroma (end of boil)	experimental fr gj2	12 g	15 min	5.8 %
Aroma (end of boil)	experimental fr gj2	12 g	10 min	5.8 %
Aroma (end of boil)	experimental fr gj2	12 g	5 min	5.8 %
Boil	Simcoe	40 g	60 min	13.2 %

Dry Hop	Smaragd	90 g	4 day(s)	3.9 %
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Yeasts

Name	Type	Form	Amount	Laboratory
US 5	Ale	Dry	2 g	---
FM52 Amerykański Sen	Ale	Liquid	2 ml	Fermentum Mobile