

ipa1

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **96**
- SRM **5.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **64 C**, Time **75 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **75 min** at **64C**
- Keep mash **15 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (83.3%)	79 %	6
Grain	Strzegom Pszeniczny	0.6 kg (10%)	81 %	6
Grain	Carahell	0.2 kg (3.3%)	77 %	26
Grain	Płatki owsiane	0.2 kg (3.3%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	60 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	35 g	15 min	15.5 %
Whirlpool	Simcoe	50 g	15 min	13.2 %
Whirlpool	Centennial	50 g	15 min	10.5 %
Whirlpool	Simcoe 70st	50 g	30 min	13.2 %
Whirlpool	Amarillo 70st	50 g	30 min	9.5 %
Dry Hop	Centennial	50 g	5 day(s)	10.5 %
Dry Hop	Amarillo	50 g	5 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	11.5 g	Fermentis
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