

ipa z tego co mam

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **56**
- SRM **6.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (66.7%)	81 %	4
Grain	Monachijski	2 kg (33.3%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Amarillo	20 g	30 min	9.5 %
Boil	Citra	20 g	15 min	12 %
Boil	Marynka	20 g	10 min	10 %
Boil	Amarillo	20 g	1 min	9.5 %
Boil	Marynka	20 g	1 min	10 %
Boil	Columbus/Tomahawk/Zeus	5 g	40 min	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us05	Ale	Slant	100 ml	---