

Polish ipa

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **45**
- SRM **4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.1 liter(s)**
- Total mash volume **14.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **11.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	3 kg (81.1%)	81 %	4
Grain	Pszeniczny	0.5 kg (13.5%)	85 %	4
Grain	Płatki owsiane	0.2 kg (5.4%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	10 g	60 min	8.3 %
Boil	Książęcy	20 g	30 min	7 %
Boil	Rody hodowlane	30 g	10 min	9.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	5 g	Mash	90 min
Fining	mech	5 g	Boil	10 min