

Podlahia

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **92**
- SRM **5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **32.4 liter(s)**

Steps

- Temp **63 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.3 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **80 min** at **63C**
- Keep mash **10 min** at **78C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.5 kg (43.2%)	80 %	7
Grain	Strzegom Pilzneński	3.5 kg (43.2%)	80 %	4
Grain	Pszenica niesłodowana	0.5 kg (6.2%)	75 %	3
Grain	Płatki owsiane	0.5 kg (6.2%)	60 %	3
Ześrutowany owies				
Grain	Acid Malt	0.1 kg (1.2%)	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Apollo	50 g	60 min	17 %
Boil	Apollo	20 g	5 min	17 %
Whirlpool	Cascade	50 g	30 min	6 %
Whirlpool	Mackinac	50 g	30 min	10 %
Dry Hop	Cascade	50 g	7 day(s)	6 %
Dry Hop	Mackinac	50 g	7 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Safale US-05	Ale	Dry	23 g	Safale
--------------	-----	-----	------	--------