

India pale ale

- Gravity **12.1 BLG**
- ABV **---**
- IBU **81**
- SRM **5.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **21.1 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **74 C**, Time **5 min**

Mash step by step

- Heat up **16.3 liter(s)** of strike water to **68.2C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **74C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3 kg (62.5%)	80 %	4
Grain	Strzegom Wiedeński	1 kg (20.8%)	79 %	10
Grain	Pszeniczny	0.5 kg (10.4%)	85 %	4
Grain	Abbey Castle	0.3 kg (6.3%)	--- %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	30 g	60 min	15.5 %
Boil	Equinox	20 g	60 min	13.4 %
Aroma (end of boil)	Glacier	30 g	5 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05 01.01.2018r	Ale	Slant	200 ml	---

Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandzki	5 g	Boil	10 min
Flavor	Skórka cytrynowa	15 g	Boil	10 min
Flavor	Trawa cytrynowy	5 g	Boil	10 min