

Takie se

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **32**
- SRM **9.1**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **27.3 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **21.1 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	5 kg (80.6%)	80 %	5
Grain	Monachijski typ II	0.5 kg (8.1%)	79 %	22
Grain	Pszeniczny	0.5 kg (8.1%)	82 %	4
Grain	karmell-aromamalz	0.2 kg (3.2%)	75 %	300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	30 g	50 min	10.5 %
Aroma (end of boil)	Saaz (Czech Republic)	30 g	10 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis Safbrew BE-256	Ale	Slant	300 ml	---

Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandzki	5 g	Boil	10 min
Flavor	Skórka z cytryny	20 g	Boil	10 min
Flavor	Skórka z pomarańczy	10 g	Boil	10 min