

Rathar

- Gravity **16.8 BLG**
- ABV ---
- IBU **39**
- SRM **6.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **3 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **65 min**
- Evaporation rate **21 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.7 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **13.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **40 min** at **72C**
- Sparge using **6 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale (Malteurop)	2 kg (51.3%)	80 %	7
Grain	Płatki pszeniczne	1 kg (25.6%)	75 %	3
Grain	Płatki owsiane	0.6 kg (15.4%)	75 %	3
Grain	Abbey (Castle)	0.3 kg (7.7%)	80 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Amarillo	25 g	5 min	7.4 %
Aroma (end of boil)	Citra	25 g	5 min	14.2 %
Whirlpool	Amarillo	25 g	0 min	7.4 %
Aroma (end of boil)	Citra	25 g	0 min	14.2 %
Boil	lunga	10 g	60 min	12.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Vermont Ale	Ale	Slant	75 ml	The Yeast Bay