

Kopio cy niedźwiedź

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **45**
- SRM **7.2**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **17.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (34.5%)	82 %	4
Grain	Viking Pale Ale malt	1 kg (17.2%)	80 %	5
Grain	Viking Munich Malt	2.5 kg (43.1%)	78 %	18
Grain	Karmelowy Czerwony	0.3 kg (5.2%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	30 g	60 min	11 %
Boil	Simcoe	15 g	15 min	13.2 %
Boil	Citra	20 g	5 min	12 %

Yeasts

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