

Białobóg

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **102**
- SRM **5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **26 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **26 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	2.5 kg (58.1%)	81 %	6
Grain	Pszeniczny	1 kg (23.3%)	85 %	4
Grain	Płatki owsiane	0.4 kg (9.3%)	60 %	3
Grain	Rye, Flaked	0.4 kg (9.3%)	78.3 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	30 g	60 min	10 %
Boil	Idaho 7	20 g	30 min	12.7 %
Whirlpool	Idaho 7	30 g	30 min	12.7 %
Whirlpool	Riwaka	50 g	30 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M12 Voss Kveik	Ale	Dry	10 g	Mangrove Jack's