

gingers

- Gravity **10 BLG**
- ABV **4 %**
- IBU **24**
- SRM **3.4**
- Style **American Pale Ale**

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 **15.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.2 liter(s)**
- Total mash volume **9.6 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **7.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Malting - Pilsneński 6-rzędowy	2 kg (83.3%)	80 %	5
Grain	Bestmaltz Acid Malt	0.2 kg (8.3%)	58.7 %	6
Grain	Rice, Flaked	0.2 kg (8.3%)	70 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	15 g	60 min	8.3 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Spice	imbir	60 g	Boil	5 min
Flavor	laktoza	200 g	Boil	15 min
Fining	mech irlandzki	5 g	Boil	15 min