

Pineokio

- Gravity **12.1 BLG**
- ABV ---
- IBU **24**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (82%)	80 %	5
Grain	Colorado Crystal 10L	0.3 kg (4.9%)	77 %	20
Grain	Colorado Honing	0.3 kg (4.9%)	80 %	12
Grain	Oats, Flaked	0.5 kg (8.2%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Aroma (end of boil)	Green Bullet	15 g	15 min	11 %
Aroma (end of boil)	Green Bullet	15 g	10 min	11 %
Aroma (end of boil)	Green Bullet	15 g	5 min	11 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Herb	Pędy sosny	200 g	Boil	10 min