

F.A.H 1,0

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **46**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (16.7%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	15 g	60 min	15.5 %
Boil	Sybilla	50 g	15 min	5.7 %
Boil	Warrior	15 g	15 min	15.5 %
Dry Hop	Sybilla	50 g	5 day(s)	5.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
us05	Ale	Slant	150 ml	---