

Forest Pale Ale 5

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **35**
- SRM **4.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **65 C**, Time **45 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (36.4%)	82 %	4
Grain	Viking Vienna Malt	2 kg (36.4%)	79 %	7
Grain	BESTMALZ - Best Wheat Malt	1 kg (18.2%)	82 %	4
Grain	Oats, Flaked	0.5 kg (9.1%)	80 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	20 g	50 min	13.2 %
Aroma (end of boil)	Simcoe	30 g	5 min	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	Pędy świerku	500 g	Boil	10 min
Flavor	Napar z pędów świerku i sosny	6000 g	Boil	0 min