

Forest IPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **23**
- SRM **11.9**
- Style **Specialty Beer**

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 **3.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **74 C**, Time **10 min**

Mash step by step

- Heat up **19.9 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **74C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (61.4%)	80 %	5
Grain	Viking Pilsner malt	1 kg (17.5%)	82 %	4
Grain	Viking Wheat Malt	0.5 kg (8.8%)	83 %	5
Grain	Fawcett - Crystal II	0.4 kg (7%)	70 %	185
Grain	Strzegom Karmel 150	0.3 kg (5.3%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nelson Sauvín	20 g	60 min	11.2 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Flavor	pałki sosny	180 g	Boil	25 min

Flavor	pałki sosny	20 g	Boil	5 min
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