

forest english ipa

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **45**
- SRM **9.1**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **68 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (78.1%)	80 %	5
Grain	Biscuit Malt	0.7 kg (10.9%)	79 %	45
Grain	Karmelowy Czerwony	0.7 kg (10.9%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Sybilla	34 g	15 min	4.5 %
Aroma (end of boil)	Admiral	34 g	15 min	13.3 %
Aroma (end of boil)	Fuggles	34 g	15 min	5.4 %
Aroma (end of boil)	Minstrel	34 g	15 min	4.9 %
Dry Hop	Sybilla	33 g	7 day(s)	4.5 %
Dry Hop	Admiral	33 g	7 day(s)	13.3 %
Dry Hop	Fuggles	33 g	7 day(s)	5.4 %
Dry Hop	Minstrel	33 g	7 day(s)	4.9 %
Dry Hop	Sybilla	33 g	7 day(s)	4.5 %
Dry Hop	Admiral	33 g	7 day(s)	13.3 %
Dry Hop	Fuggles	33 g	7 day(s)	5.4 %

Dry Hop	Minstrel	33 g	7 day(s)	4.9 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Spice	szyszki sosnowe zalané wodą	10 g	Secondary	7 day(s)