

Forest Rye IPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **70**
- SRM **15.4**
- Style **Rye IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **66 C**, Time **30 min**
- Temp **68 C**, Time **15 min**
- Temp **74 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **15 min** at **68C**
- Keep mash **15 min** at **74C**
- Keep mash **5 min** at **78C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.5 kg (69.2%)	79 %	6
Grain	Żytni	1.5 kg (23.1%)	85 %	8
Grain	Strzegom Czekoladowy 400	0.5 kg (7.7%)	68 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	40 g	60 min	13 %
Boil	chinook	10 g	40 min	9.5 %
Boil	Citra	25 g	10 min	12 %
Boil	Citra	25 g	5 min	12 %
Dry Hop	Citra	100 g	3 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Herb	pędy sosny i świerku	140 g	Boil	15 min