

FOREST BLACK IPA

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **57**
- SRM **34.9**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (66.7%)	80 %	4
Grain	Carafa III	0.7 kg (9.3%)	70 %	1034
Grain	Słód owsiany Fawcett	0.5 kg (6.7%)	61 %	5
Grain	Płatki pszeniczne	0.5 kg (6.7%)	60 %	3
Grain	Pszeniczny	0.8 kg (10.7%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook pl	40 g	60 min	6.2 %
Boil	Magnum	16 g	60 min	10 %
Boil	Pacific Gem	20 g	30 min	12.6 %
Boil	Chinook	15 g	15 min	10.7 %
Aroma (end of boil)	Simcoe	20 g	0 min	11.3 %
Aroma (end of boil)	Pacific Gem	20 g	0 min	15.3 %
Aroma (end of boil)	Chinook	10 g	0 min	13 %
Dry Hop	Pacific Gem	60 g	5 day(s)	15.3 %
Dry Hop	Chinook	40 g	5 day(s)	13 %
Dry Hop	Simcoe	30 g	5 day(s)	11.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	---

Extras

Type	Name	Amount	Use for	Time
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Spice	pechy sosny	50 g	Boil	5 min
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