

BISON GRASS BLACK IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **54**
- SRM **32.8**
- Style **Black 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 **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (48.4%)	80 %	5
Grain	Viking Pilsner malt	2 kg (32.3%)	82 %	4
Grain	Viking Barwiący	0.2 kg (3.2%)	65 %	1400
Grain	Carafa III	0.3 kg (4.8%)	70 %	1034
Grain	Crystal II 200	0.2 kg (3.2%)	71 %	200
Adjunct	Briess - Oat Flakes	0.5 kg (8.1%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	25 g	25 min	10.5 %
Boil	Magnum	10 g	60 min	13.5 %
Boil	Citra	30 g	10 min	12 %
Whirlpool	Columbus/Tomahawk/Zeus	40 g	10 min	15.5 %
Dry Hop	Citra	70 g	5 day(s)	12 %
Dry Hop	Columbus/Tomahawk/Zeus	30 g	5 day(s)	15.5 %
Dry Hop	Galaxy	30 g	5 day(s)	15 %