

Black boss

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **75**
- SRM **38.6**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **16 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2.5 kg (54.6%)	85 %	7
Grain	Weyermann - Melanoiden Malt	0.4 kg (8.7%)	81 %	53
Grain	Pszeniczny	0.5 kg (10.9%)	85 %	4
Grain	Biscuit Malt	0.2 kg (4.4%)	79 %	45
Grain	Żytni	0.4 kg (8.7%)	85 %	8
Grain	Żytni	0.5 kg (10.9%)	85 %	1200
Grain	cukier	0.08 kg (1.7%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Boil	Chinook	30 g	15 min	13 %
Boil	Chinook	20 g	1 min	13 %