

BLACK IIPA

- Gravity **22 BLG**
- ABV **9.9 %**
- IBU **113**
- SRM **36.8**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (71.4%)	79 %	6
Grain	Carafa III	0.5 kg (7.1%)	70 %	1034
Grain	Carahell	0.5 kg (7.1%)	77 %	26
Grain	Strzegom Monachijski typ II	1 kg (14.3%)	79 %	22

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	28 g	60 min	9.5 %
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Cascade	35 g	30 min	6 %
Boil	Citra	25 g	30 min	12 %