

Black ipa

- Gravity **16.4 BLG**
- ABV ---
- IBU **88**
- 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 **18 liter(s)**
- Total mash volume **24 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Carahell	0.4 kg (6.7%)	77 %	26
Grain	Weyermann - Carafa II	0.4 kg (6.7%)	70 %	837
Grain	Biscuit Malt	0.2 kg (3.3%)	79 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	20 g	60 min	15.5 %
Boil	Dr Rudi	20 g	60 min	11.8 %
Boil	Dr Rudi	30 g	30 min	11.8 %
Boil	Cascade	10 g	10 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	Safale