

Black IPA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **61**
- SRM **36.5**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **75C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (43.5%)	80 %	5
Grain	Strzegom Wiedeński	1.5 kg (21.8%)	79 %	10
Grain	Strzegom Czekoladowy 1200	0.65 kg (9.4%)	68 %	1202
Grain	Biscuit Malt	0.47 kg (6.8%)	79 %	45
Grain	Strzegom Monachijski typ I	0.5 kg (7.3%)	79 %	16
Sugar	Cukier brązowy	0.3 kg (4.4%)	--- %	---
Grain	Żytni	0.47 kg (6.8%)	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	50 g	60 min	11 %
Boil	Amarillo	30 g	30 min	7 %
Aroma (end of boil)	Sorachi Ace	20 g	0 min	10 %
Dry Hop	Amarillo	20 g	3 day(s)	9.5 %
Dry Hop	Książęcy	20 g	3 day(s)	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
US - 05	Ale	Slant	250 ml	---

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	4 g	Boil	60 min
Water Agent	Chlorek wapnia	8 g	Boil	60 min