

BLACK IPA

- Gravity **13.6 BLG**
- ABV ---
- IBU **43**
- SRM **28.3**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **14.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **12.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **0.4 liter(s)** of **76C** water or to achieve **10.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (87.7%)	80 %	5
Grain	Strzegom Karmel 150	0.1 kg (4.4%)	75 %	150
Grain	Jęczmień palony	0.18 kg (7.9%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Smaragd	40 g	60 min	3.9 %
Whirlpool	Smaragd	25 g	5 min	3.9 %

Yeasts

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