

Black IPA

- Gravity **14.3 BLG**
- ABV ---
- IBU **73**
- SRM **32.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss --- %
- Size with trub loss --- liter(s)
- Boil time **70 min**
- Evaporation rate --- %/h
- Boil size --- liter(s)

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- liter(s) / kg
- Mash size **20 liter(s)**
- Total mash volume **25.75 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **67 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **-14.3 liter(s)** of **76C** water

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	5 kg	80 %	4
Grain	czekoladowy jasny	0.2 kg	63 %	400
Grain	Brown Malt (British Chocolate)	0.15 kg	70 %	172
Grain	Weyermann - Carawheat	0.1 kg	77 %	129
Grain	karmelowy strzegom	0.15 kg	60 %	600
Grain	Jęczmień palony	0.15 kg	55 %	1333

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	admiral	30 g	70 min	14.3 %
Boil	belma	15 g	70 min	11.6 %
Boil	Nelson Souvin	15 g	30 min	11.4 %
Aroma (end of boil)	Amarillo	10 g	5 min	9.5 %
Aroma (end of boil)	Mosaic	10 g	5 min	10 %
Aroma (end of boil)	Nelson Souvin	10 g	5 min	11.4 %
Aroma (end of boil)	Amarillo	3 g	1 min	9.5 %

Aroma (end of boil)	Mosaic	3 g	1 min	10 %
Aroma (end of boil)	Nelson Souvin	3 g	1 min	11.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
US 05	Ale	Slant	150 ml	---