

Black Ipa

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **33**
- SRM **44.4**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (56.6%)	80 %	7
Grain	Słód pszeniczny Bestmalz	0.75 kg (14.2%)	82 %	5
Grain	Weyermann - Carafa III	0.3 kg (5.7%)	70 %	1300
Grain	Karmelowy 600EBC viking malt	0.5 kg (9.4%)	70 %	600
Grain	Viking Czekoladowy ciemny	0.25 kg (4.7%)	67 %	1100
Grain	Płatki owsiane	0.35 kg (6.6%)	60 %	3
Grain	enzymatyczny	0.15 kg (2.8%)	60 %	7

Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Superdelic	15 g	10 min	9.9 %
Boil	Citra	25 g	40 min	12 %
Aroma (end of boil)	Motueka	10 g	5 min	7.5 %
Whirlpool	Motueka	10 g	10 min	7.5 %
Dry Hop	Superdelic	15 g	3 day(s)	9.9 %

Dry Hop	Wai-iti	10 g	3 day(s)	3 %
Dry Hop	citra	10 g	3 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M12 Voss Kveik	Ale	Dry	10 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Flavor	papryczka habanero	2 g	Boil	10 min
Fining	mech irlandzki	10 g	Boil	10 min
Water Agent	chlorek wapnia	1 g	Mash	---
Water Agent	siarczan wapnia	2 g	Mash	---