black ipa

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **58**
- SRM **29.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg *(73.8%)*	80 %	5
Grain	Monachijski Ciemny Steinbach	1 kg *(16.4%)*	100 %	30
Grain	Carafa III	0.2 kg *(3.3%)*	70 %	1034
Grain	Strzegom pszenica prażona	0.2 kg *(3.3%)*	70 %	1000
Grain	karmelowy ciemny	0.2 kg *(3.3%)*	--- %	600

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	10 g	20 min	15.5 %
Aroma (end of boil)	Cascade	15 g	10 min	6 %
Aroma (end of boil)	Centennial	15 g	5 min	10.5 %
Aroma (end of boil)	Simcoe	10 g	0 min	13.2 %
Dry Hop	Cascade	35 g	7 day(s)	6 %
Dry Hop	Centennial	35 g	5 day(s)	10.5 %
Dry Hop	Simcoe	40 g	3 day(s)	13.2 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	4 g	Boil	15 min
Spice	kafir	10 g	Boil	15 min
Spice	kafir	5 g	Bottling	---

Notes

- Herbatka z 5g kafiru dodana do piwa przed butelkowaniem

  Piwo zajęło II miejsce w Finale Kuźni Piwowarów 2019 w kategorii Black IPA z dodatkami
  May 5, 2019, 1:55 PM