

Black IPA Centennial USA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **39**
- SRM **44.4**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.35 kg (69.2%)	79 %	6
Grain	Słód pszeniczny Bestmalz	0.325 kg (9.6%)	82 %	5
Grain	Carafa III	0.25 kg (7.4%)	70 %	1300
Grain	Strzegom Czekoladowy 1200	0.17 kg (5%)	68 %	1200
Grain	Jęczmień palony	0.08 kg (2.4%)	55 %	1000
Grain	Płatki owsiane	0.1 kg (2.9%)	85 %	3
Grain	Płatki pszeniczne	0.12 kg (3.5%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial USA 2019	10 g	60 min	9.5 %
Boil	Centennial USA 2019	10 g	30 min	9.5 %
Boil	Centennial USA 2019	10 g	15 min	9.5 %
Whirlpool	Centennial USA 2019	20 g	0 min	9.5 %
Dry Hop	Centennial USA 2019	50 g	4 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05 I	Ale	Slant	100 ml	Safale