

BLACK IPA/CDA v8 #116

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **60**
- SRM **28.9**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **21.1 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **16 %/h**
- Boil size **28.4 liter(s)**

Mash information

- Mash efficiency **82.8 %**
- Liquor-to-grist ratio **3.45 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.8 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **7 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **71.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **7 min** at **77C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **28.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep©Ale	4.2 kg (72.4%)	82.1 %	5.5
Grain	Viking - pszeniczny	0.4 kg (6.9%)	83 %	5
Grain	Viking - monachijski II	0.5 kg (8.6%)	79 %	22
Grain	Chateau - Cara gold	0.25 kg (4.3%)	78 %	120
Grain	Weyermann - Carafa II Special	0.25 kg (4.3%)	65 %	1150
Grain	Fawcett - czekoladowy pszeniczny	0.2 kg (3.4%)	72.7 %	1000

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25.79 g	60 min	11.5 %
Aroma (end of boil)	Columbus	30 g	10 min	15.7 %
Aroma (end of boil)	Simcoe	30 g	5 min	14.5 %
Aroma (end of boil)	Citra	20 g	5 min	13.5 %
Aroma (end of boil)	Cascade US	50 g	1 min	7.1 %
Dry Hop	Simcoe	70 g	2 day(s)	14.5 %

Dry Hop	Citra	30 g	2 day(s)	13.5 %
Dry Hop	Columbus	20 g	2 day(s)	15.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP090 - San Diego Super Yeast	Ale	Slant	180 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	3 g	Mash	---
Water Agent	kwask mlekowy 80% [ml]	3.5 g	Mash	---
Water Agent	chlorek wapnia [ml]	0 g	Mash	---
Water Agent	węglan wapnia/kreda	7 g	Mash	---
Water Agent	sól epsom	1.5 g	Mash	---
Fining	irish moss	4 g	Boil	5 min
Water Agent	kwask askorbinowy	4 g	Bottling	---