

# BLACK IPA/CDA v7 #101

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **59**
- SRM **29.8**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20.6 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **80 min**
- Evaporation rate **14 %/h**
- Boil size **26.6 liter(s)**

## Mash information

- Mash efficiency **81.7 %**
- Liquor-to-grist ratio **3.45 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **7 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **73.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **7 min** at **76C**
- Sparge using **12.4 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep©Ale	4.2 kg (72.4%)	82.1 %	5.5
Grain	Bestmalz - 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%)	75 %	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	Warrior	30 g	60 min	14.7 %
Aroma (end of boil)	Simcoe	30 g	10 min	13.2 %
Aroma (end of boil)	Citra	20 g	1 min	13.5 %
Aroma (end of boil)	Cascade US	30 g	1 min	7.1 %
Dry Hop	Simcoe	30 g	3 day(s)	13.2 %

Dry Hop	Citra	20 g	3 day(s)	13.5 %
Dry Hop	Cascade US	50 g	3 day(s)	7.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	190 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	2 g	Mash	---
Water Agent	kwas mlekowy 80% [ml]	3.03 g	Mash	---
Water Agent	chlorek wapnia [ml]	1.72 g	Mash	---
Water Agent	węglan wapnia/kreda	7 g	Mash	---
Water Agent	sól epsom	1.5 g	Mash	---
Fining	irish moss	3 g	Boil	5 min