

# CDA

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- Gravity **16.8 BLG**
- ABV ---
- IBU **57**
- SRM **40**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **16 %**
- Size with trub loss **24.4 liter(s)**
- Boil time **80 min**
- Evaporation rate **17 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **29.2 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **22.4 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (2 Row) Ger	5.5 kg (80.9%)	81 %	4
Grain	Biscuit Malt	0.2 kg (2.9%)	79 %	45
Grain	Carahell	0.5 kg (7.4%)	74 %	50
Grain	Weyermann - Carafa II	0.5 kg (7.4%)	70 %	1100
Grain	Czekoladowy	0.1 kg (1.5%)	60 %	788

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	11.2 %
Boil	Sorachi Ace	30 g	30 min	10 %
Boil	Willamette	30 g	15 min	5 %
Whirlpool	Amarillo	25 g	0 min	8.9 %
Dry Hop	Mosaic	10 g	7 day(s)	10 %
Dry Hop	Centennial	28 g	7 day(s)	10.5 %
Dry Hop	Simcoe	33 g	7 day(s)	13 %
Dry Hop	Citra	15 g	4 day(s)	12 %

Dry Hop	Equinox	15 g	4 day(s)	13.1 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Liquid	250 ml	Safale