

Back to Black

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **50**
- SRM **27.3**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **31.9 liter(s)**

Steps

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

Mash step by step

- Heat up **24.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4.5 kg (63.4%)	85 %	7
Grain	Weyermann - Pale Wheat Malt	2 kg (28.2%)	85 %	5
Grain	Weyermann - Chocolate Wheat	0.25 kg (3.5%)	74 %	788
Grain	Weyermann - Carafa III	0.35 kg (4.9%)	70 %	1024

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	50 g	20 min	12 %
Boil	Simcoe	30 g	7 min	13.2 %
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Dry Hop	Amarillo	30 g	2 day(s)	9.5 %
Dry Hop	Citra	30 g	2 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis