

Jet Black Heart Clone

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **24**
- SRM **27.8**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **8 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **25.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.6 liter(s)**
- Total mash volume **19.4 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.85 kg (54.3%)	80 %	5
Sugar	Milk Sugar (Lactose)	0.4 kg (7.6%)	76.1 %	0
Grain	Oats, Flaked	0.4 kg (7.6%)	80 %	2
Grain	Fawcett - Brown	0.4 kg (7.6%)	72 %	180
Grain	Strzegom Karmel 150	0.3 kg (5.7%)	75 %	150
Grain	Pszeniczny	0.3 kg (5.7%)	85 %	4
Grain	Fawcett - Dark Crystal	0.2 kg (3.8%)	71 %	300
Grain	Briess - Black Malt	0.2 kg (3.8%)	55 %	985
Grain	Weyermann - Dehusked Carafo I	0.2 kg (3.8%)	70 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	13 g	60 min	13.5 %
Boil	Sorachi Ace	10 g	20 min	10 %
Dry Hop	Sorachi Ace	40 g	3 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Liquid	1380 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCl2	3.45 g	Mash	60 min
Fining	Whirlfloc	2.88 g	Boil	10 min
Water Agent	Lactic Acid	5.75 g	Mash	60 min