

Jet Black Heart Clone

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **27**
- SRM **26.6**
- 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 **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **17.3 liter(s)**

Steps

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

Mash step by step

- Heat up **13 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **16.7 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	2.5 kg (53.1%)	80 %	5
Sugar	Milk Sugar (Lactose)	0.38 kg (8.1%)	76.1 %	0
Grain	Oats, Flaked	0.38 kg (8.1%)	80 %	2
Grain	Fawcett - Brown	0.38 kg (8.1%)	72 %	180
Grain	Strzegom Karmel 150	0.25 kg (5.3%)	75 %	150
Grain	Pszeniczny	0.25 kg (5.3%)	85 %	4
Grain	Fawcett - Dark Crystal	0.19 kg (4%)	71 %	300
Grain	Briess - Black Malt	0.19 kg (4%)	55 %	985
Grain	Weyermann - Dehusked Carafa I	0.19 kg (4%)	70 %	690

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 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	1200 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCl2	3 g	Mash	60 min
Fining	Whirlfloc	2.5 g	Boil	10 min
Water Agent	Lactic Acid	5 g	Mash	60 min