

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 |