

JET BLACK HEART

- Gravity **10 BLG**
- ABV **4 %**
- IBU **31**
- SRM **27**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **53.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **64.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.3 liter(s)**
- Total mash volume **41.8 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (57.5%)	80 %	5
Grain	Fawcett - Dark Crystal	0.5 kg (4.8%)	71 %	300
Grain	Wheat, Torrified	0.68 kg (6.5%)	79 %	4
Grain	Fawcett - Brown	0.68 kg (6.5%)	72 %	180
Grain	Black (Patent) Malt	0.4 kg (3.8%)	55 %	985
Grain	Weyermann - Carafa I	0.5 kg (4.8%)	70 %	690
Grain	Platki owsiane	1 kg (9.6%)	85 %	3
Grain	Simpsons - Crystal Extra Dark	0.68 kg (6.5%)	74 %	315

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	13.5 %
Boil	Sorachi Ace	15 g	60 min	10 %
Boil	Sorachi Ace	15 g	20 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	22 g	---

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	10 g	Boil	15 min
Water Agent	Gips piwowarski	4 g	Mash	75 min
Water Agent	Chlorek wapnia	6 g	Mash	75 min

Water Agent	Kwaśny węglan sodu	4 g	Mash	75 min
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