

# Klon Jet Black Heart

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **25**
- SRM **29.4**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.7 liter(s)**
- Total mash volume **18.3 liter(s)**

## Steps

- Temp **65 C**, Time **75 min**

## Mash step by step

- Heat up **13.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **75 min** at **65C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.75 kg (55.4%)	80 %	5
Grain	Strzegom Pszeniczny	0.25 kg (5%)	81 %	6
Grain	Strzegom Karmel 300	0.19 kg (3.8%)	70 %	299
Grain	Brown Malt (British Chocolate)	0.38 kg (7.7%)	70 %	128
Grain	Strzegom Barwiący	0.19 kg (3.8%)	68 %	1300
Grain	Carafa	0.19 kg (3.8%)	70 %	664
Grain	Płatki owsiane	0.38 kg (7.7%)	85 %	3
Grain	Strzegom Karmel 150	0.25 kg (5%)	75 %	150
Sugar	Milk Sugar (Lactose)	0.38 kg (7.7%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	12.5 g	60 min	13.5 %
Boil	Sorachi Ace	6.3 g	30 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Wyeast - American Ale	Ale	Liquid	125 ml	Wyeast Labs
-----------------------	-----	--------	--------	-------------

## Notes

- klon brewdoga zerznięty z DIYDOG  
*Sep 13, 2017, 2:40 PM*