

# Black Sugar

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **17**
- SRM **38.4**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **47 liter(s)**
- Trub loss **5 %**
- Size with trub loss **49.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **59.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **48 liter(s)**
- Total mash volume **60 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **48 liter(s)** of strike water to **59.4C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **23.4 liter(s)** of **76C** water or to achieve **59.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (36.5%)	80 %	5
Grain	Karmelowy Czerwony	3 kg (21.9%)	75 %	59
Grain	Strzegom Karmel 600	1 kg (7.3%)	68 %	601
Grain	Strzegom Monachijski typ I	2 kg (14.6%)	79 %	16
Grain	Płatki owsiane	1 kg (7.3%)	60 %	3
Liquid Extract	Bruntal ekstrakt słodowy ciemny	1.7 kg (12.4%)	90 %	650

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	50 g	60 min	4.5 %
Boil	East Kent Goldings	50 g	20 min	4.5 %
Boil	East Kent Goldings	50 g	5 min	4.5 %
Aroma (end of boil)	East Kent Goldings	50 g	0 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	---

## Notes

- Brzeczka 21.05  
Fermentacja burzliwa 10dni  
Cicha 17dni  
*May 21, 2021, 1:29 PM*