

Czarny Ziutek

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **54**
- SRM **31.5**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **9 %**
- Size with trub loss **10.9 liter(s)**
- Boil time **65 min**
- Evaporation rate **8 %/h**
- Boil size **12.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.05 liter(s) / kg**
- Mash size **7 liter(s)**
- Total mash volume **9.3 liter(s)**

Steps

- Temp **68 C**, Time **70 min**

Mash step by step

- Heat up **7 liter(s)** of strike water to **75.9C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **12.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom (Viking) Pale Ale	2 kg (80%)	79 %	6
Grain	Strzegom (Viking) Czekoladowy ciemny	0.1 kg (4%)	68 %	900
Grain	Strzegom (Viking) Jęczmień Prażony	0.2 kg (8%)	70 %	985
Adjunct	Płatki jęczmienne	0.2 kg (8%)	78 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	15 g	65 min	7 %
Boil	Tradition	15 g	65 min	5.5 %
Boil	East Kent Goldings	11 g	65 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	6 g	Safale
Uwodnione				