

Śledziowy Stout

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **33**
- SRM **36**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **70 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **1 min** at **76C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (64.5%)	80 %	5
Grain	Karmelowy Czerwony	1 kg (16.1%)	75 %	59
Grain	Płatki owsiane	0.5 kg (8.1%)	60 %	3
Grain	Viking Czekoladowy ciemny	0.2 kg (3.2%)	67 %	900
Grain	Jęczmień palony	0.5 kg (8.1%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nugget	25 g	60 min	12 %
Aroma (end of boil)	Nugget	25 g	1 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale