

Stout

- Gravity **13 BLG**
- ABV ---
- IBU **38**
- SRM **40**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **12 %**
- Size with trub loss **25.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **32.3 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

Steps

- Temp **67 C**, Time **80 min**

Mash step by step

- Heat up **17.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **67C**
- Sparge using **20.8 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (87%)	79 %	6
Grain	Strzegom Czekoladowy 1200	0.5 kg (8.7%)	68 %	1200
Grain	Karmelowy Czerwony	0.25 kg (4.3%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %
Boil	Sybilla	30 g	60 min	6 %
Boil	Sybilla	20 g	10 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale