

Stout

- Gravity **16.7 BLG**
- ABV ---
- IBU **31**
- SRM **40**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

Steps

- Temp **38 C**, Time **20 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **22.2 liter(s)** of strike water to **41C**
- Add grains
- Keep mash **20 min** at **38C**
- Keep mash **45 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (54.1%)	79 %	6
Grain	Żytni	2 kg (27%)	85 %	8
Grain	Jęczmień palony	0.3 kg (4.1%)	55 %	985
Grain	Strzegom Barwiący	0.3 kg (4.1%)	68 %	1300
Grain	Strzegom Karmel 600	0.2 kg (2.7%)	68 %	601
Grain	Strzegom Czekoladowy 1200	0.3 kg (4.1%)	68 %	1202
Grain	Strzegom pszeniczny	0.3 kg (4.1%)	81 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Kent Goldings	45 g	60 min	5.5 %
Boil	Kent Goldings	45 g	10 min	5.5 %

Yeasts

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