

Black Bar

- Gravity **27.2 BLG**
- ABV **13 %**
- IBU **60**
- SRM **81.4**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **29.7 liter(s)**
- Total mash volume **44.5 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **29.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (33.7%)	79 %	6
Grain	Weyermann - Smoked Malt	3 kg (20.2%)	81 %	6
Grain	Słód Wędzony Steinbach	2 kg (13.5%)	80 %	5
Grain	Pszeniczny	1 kg (6.7%)	85 %	4
Grain	Crystal	0.6 kg (4%)	80 %	150
Grain	Castle Cafe	0.55 kg (3.7%)	75.5 %	480
Grain	Strzegom Karmel 600	0.2 kg (1.3%)	68 %	601
Grain	Jęczmień palony	0.5 kg (3.4%)	55 %	985
Grain	Strzegom pszenica prażona	0.5 kg (3.4%)	70 %	1000
Grain	Black (Patent) Malt	0.5 kg (3.4%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.5 kg (3.4%)	68 %	1200
Grain	Barwiący	0.5 kg (3.4%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	70 min	9.5 %
Boil	Citra	20 g	70 min	12 %
Boil	Simcoe	20 g	70 min	13.2 %
Boil	El Dorado	20 g	70 min	15 %
Boil	Mosaic	20 g	79 min	10 %
Dry Hop	Amarillo	10 g	7 day(s)	9.5 %
Dry Hop	Citra	10 g	7 day(s)	12 %
Dry Hop	Simcoe	10 g	7 day(s)	13.2 %
Dry Hop	El Dorado	10 g	7 day(s)	15 %
Dry Hop	Mosaic	10 g	7 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Fermentis