

- Gravity **16.6 BLG**
- ABV ---
- IBU **31**
- SRM **43.1**
- Style **Sweet 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **27.6 liter(s)**

Steps

- Temp **30 C**, Time **1 min**
- Temp **70 C**, Time **90 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **31.7C**
- Add grains
- Keep mash **1 min** at **30C**
- Keep mash **90 min** at **70C**
- Sparge using **14 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 (58%)	79 %	6
Grain	Oats, Flaked	0.8 kg (11.6%)	80 %	2
Grain	Żytni	1 kg (14.5%)	85 %	8
Grain	Strzegom pszenica prażona	0.3 kg (4.3%)	70 %	1000
Grain	Chocolate Malt (US)	0.5 kg (7.2%)	60 %	690
Grain	Weyermann - Dehusked Carafo III	0.3 kg (4.3%)	70 %	1024

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Marynka	20 g	30 min	10 %
Boil	Marynka	20 g	10 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale III	Ale	Liquid	50 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Flavor	Espresso	200 g	Primary	0 day(s)