

Ris xd

- Gravity **26.4 BLG**
- ABV **12.5 %**
- IBU **68**
- SRM **51.1**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **7 liter(s)**
- Trub loss **5 %**
- Size with trub loss **7.3 liter(s)**
- Boil time **240 min**
- Evaporation rate **15 %/h**
- Boil size **13 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **15.6 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **11.5 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **5.6 liter(s)** of **76C** water or to achieve **13 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.85 kg (69.5%)	81 %	4
Grain	Płatki owsiane	0.5 kg (12.2%)	60 %	3
Grain	Abbey Malt Weyermann	0.15 kg (3.7%)	75 %	45
Grain	Fawcett - Crystal	0.15 kg (3.7%)	70 %	160
Grain	Weyermann - Dehusked Carafa II	0.2 kg (4.9%)	70 %	837
Grain	Jęczmień palony	0.15 kg (3.7%)	55 %	985
Grain	Castle Chocolat	0.1 kg (2.4%)	60 %	827

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	12.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	6.6 g	Fermentis