

Festout

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **41**
- SRM **51.6**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.75 liter(s) / kg**
- Mash size **20.9 liter(s)**
- Total mash volume **28.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20.9 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.5 kg (59.2%)	79 %	6
Grain	Żytni	1 kg (13.2%)	85 %	8
Grain	Weyermann Caramunich 3	0.5 kg (6.6%)	76 %	150
Grain	Chocolate Malt (UK)	0.5 kg (6.6%)	73 %	887
Grain	Weyermann - Dehusked Carafo III	0.5 kg (6.6%)	70 %	1024
Grain	Jęczmień palony	0.1 kg (1.3%)	55 %	985
Grain	Castle Cafe	0.5 kg (6.6%)	75.5 %	480

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	40 g	60 min	11 %
Boil	Lublin (Lubelski)	30 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis