

Extra Stout

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **28**
- SRM **32.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	5 kg (79.4%)	81 %	4
Grain	Caraaroma	0.3 kg (4.8%)	--- %	400
Grain	Jęczmień palony	0.3 kg (4.8%)	55 %	1150
Grain	carfa 1	0.1 kg (1.6%)	--- %	---
Adjunct	płatki jęczmienne	0.4 kg (6.3%)	--- %	---
Grain	Barwiący	0.2 kg (3.2%)	55 %	1600

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	55 min	9.2 %
Boil	Fugles UK	30 g	45 min	4.4 %
Boil	Fugles UK	60 g	10 min	4.4 %

Yeasts

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