

Stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **20**
- SRM **31.2**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Malting - Pilszeński 6-rzędowy	5 kg (80.6%)	80 %	5
Grain	Caraaroma	0.3 kg (4.8%)	78 %	400
Grain	Jęczmień palony	0.2 kg (3.2%)	55 %	985
Grain	Carafa	0.1 kg (1.6%)	70 %	664
Grain	Płatki owsiane	0.4 kg (6.5%)	85 %	3
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (3.2%)	73 %	1001

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	30 g	50 min	5.1 %
Aroma (end of boil)	Styrian Golding	30 g	15 min	3.6 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Water Agent	laktoza	250 g	Boil	15 min