

staut

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **32**
- SRM **31**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.1 kg (83.7%)	81 %	4
Grain	Fawcett - Pale Chocolate	0.2 kg (4.1%)	71 %	600
Grain	Weyermann - Carafa I	0.2 kg (4.1%)	70 %	690
Grain	Extra black	0.2 kg (4.1%)	65 %	1400
Grain	Strzegom Czekoladowy jasny	0.2 kg (4.1%)	68 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	20 g	60 min	10 %
Boil	Sybilla	20 g	30 min	4.5 %
Boil	Sybilla	20 g	10 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale