

Stout us

- Gravity **17.5 BLG**
- ABV ---
- IBU **63**
- SRM **42**
- Style **American 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 **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **74 C**, Time **15 min**
- Temp **83 C**, Time **3 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **74C**
- Keep mash **3 min** at **83C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (73.5%)	80 %	5
Grain	Strzegom Czekoladowy ciemny	0.3 kg (4.4%)	68 %	1200
Grain	Strzegom Karmel 150	1 kg (14.7%)	75 %	150
Grain	Chit Malt	0.5 kg (7.4%)	50 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galena	50 g	60 min	12 %
Boil	Lemon drop	15 g	15 min	4.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale