

S Stout

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **30**
- SRM **46.4**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (50%)	80 %	5
Grain	Płatki owsiane	0.4 kg (10%)	85 %	3
Grain	Strzegom Karmel 150	0.5 kg (12.5%)	75 %	150
Grain	Viking Karmel 100	0.5 kg (12.5%)	75 %	100
Grain	Viking Karmel 400	0.2 kg (5%)	75 %	400
Grain	Strzegom Czekoladowy ciemny	0.2 kg (5%)	68 %	1200
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (5%)	73 %	1001

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	15 g	60 min	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale