

Stout

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **68**
- SRM **29.2**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1 kg (28.6%)	80 %	5
Grain	Strzegom Pilzneński	1 kg (28.6%)	80 %	4
Grain	Strzegom Monachijski typ II	1 kg (28.6%)	79 %	22
Grain	Jęczmień palony	0.25 kg (7.1%)	55 %	985
Grain	Strzegom pszenica prażona	0.15 kg (4.3%)	70 %	1000
Grain	Strzegom Barwiący	0.1 kg (2.9%)	68 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	hallertauer taurus	25 g	10 min	11.1 %
Aroma (end of boil)	Sybilla	50 g	60 min	8.8 %

Extras

Type	Name	Amount	Use for	Time
Flavor	Lukrecja, Korzeń lukrecji	50 g	Boil	60 min
Fining	mech irlandzki	4 g	Boil	65 min