

## #34 Waiter konkursowy

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **40**
- SRM **35.9**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **20.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

### Steps

- Temp **68 C**, Time **75 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **75 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **20.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.7 kg (55.8%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (20.7%)	79 %	22
Grain	Fawcett - Pale Chocolate	0.25 kg (5.2%)	71 %	600
Grain	Strzegom Czekoladowy ciemny	0.25 kg (5.2%)	68 %	1200
Grain	Weyermann - Dehusked Carafa III	0.1 kg (2.1%)	70 %	1024
Sugar	Milk Sugar (Lactose)	0.54 kg (11.2%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	12.9 %
Boil	Magnum	10 g	40 min	12.9 %
Boil	Magnum	10 g	20 min	12.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis