

## Przesłuchanie Wstępne

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **22**
- SRM **34.9**
- Style **Sweet 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 **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

### Steps

- Temp **66.6 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.4C**
- Add grains
- Keep mash **45 min** at **66.6C**
- Keep mash **15 min** at **72C**
- Sparge using **14.9 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	3.6 kg (66.1%)	80 %	6
Grain	Płatki owsiane	0.3 kg (5.5%)	85 %	2
Grain	Płatki pszeniczne	0.3 kg (5.5%)	85 %	3.2
Grain	Strzegom Czekoladowy 400	0.25 kg (4.6%)	68 %	400
Grain	Strzegom Karmel 300	0.25 kg (4.6%)	70 %	299
Grain	Strzegom Czekoladowy 1200	0.2 kg (3.7%)	68 %	817.5
Grain	Jęczmień palony	0.3 kg (5.5%)	55 %	1200
Sugar	Milk Sugar (Lactose)	0.25 kg (4.6%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	7.7 %
Aroma (end of boil)	Marynka	5 g	10 min	7.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale