

**4,76%**

- Gravity **17.9 BLG**
- ABV ---
- IBU **24**
- SRM **35.4**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

### Steps

- Temp **69 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **15.6 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **40 min** at **69C**
- Keep mash **10 min** at **72C**
- Keep mash **20 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	Strzegom Pale Ale	3.6 kg (56.3%)	79 %	6
Grain	Pszeniczny	0.5 kg (7.8%)	85 %	4
Grain	Strzegom Karmel 30	0.7 kg (10.9%)	75 %	30
Grain	Jęczmień palony	0.4 kg (6.3%)	55 %	985
Adjunct	płatki owsiane	0.4 kg (6.3%)	--- %	---
Sugar	laktoza	0.8 kg (12.5%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	20 min	4 %

### Yeasts

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