

**19,11,2022**

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **27**
- SRM **10.3**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **30.1 liter(s)**

### Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **23.4 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (74.6%)	79 %	6
Grain	Wiedeński	1 kg (14.9%)	79 %	10
Grain	Karmelowy Jasny 50 EBC	0.5 kg (7.5%)	75 %	50
Grain	Strzegom karmel 400	0.2 kg (3%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	30 g	60 min	7.1 %
Boil	Lublin (Lubelski)	30 g	15 min	6 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	0 min	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Voss Kveik	Ale	Slant	150 ml	---

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc T	0.5 g	Boil	15 min