

**2023.11.19**

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **18**
- SRM **4.4**

### 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 **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.7 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 (83.3%) | 79 %  | 5   |
| Grain | Wiedeński         | 1 kg (16.7%) | 79 %  | 10  |

### Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Hallertau Magnum  | 15 g   | 60 min | 11.8 %     |
| Boil                | Lublin (Lubelski) | 10 g   | 15 min | 3.8 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 35 g   | 0 min  | 3.8 %      |

### Yeasts

| Name                           | Type | Form  | Amount | Laboratory |
|--------------------------------|------|-------|--------|------------|
| Lallemand - LalBrew Voss Kveik | Ale  | Slant | 100 ml | Lallemand  |

### Extras

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