

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **51**
- SRM **19.4**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **35 liter(s)**

### Steps

- Temp **62 C**, Time **50 min**
- Temp **30 C**, Time **68 min**

### Mash step by step

- Heat up **26.3 liter(s)** of strike water to **31.7C**
- Add grains
- Keep mash **68 min** at **30C**
- Keep mash **50 min** at **62C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **31.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6 kg (68.6%)	80 %	4
Grain	Płatki owsiane	1.2 kg (13.7%)	85 %	3
Grain	Płatki pszeniczne	1.2 kg (13.7%)	--- %	---
Grain	Jęczmień palony	0.35 kg (4%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zythos	20 g	60 min	11 %
Boil	Azacca	20 g	60 min	14 %
Boil	Zythos	10 g	30 min	11 %
Boil	Azacca	10 g	30 min	14 %
Boil	Zythos	20 g	0 min	11 %
Boil	Azacca	20 g	0 min	14 %