

- 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 % |