

TO DO

- Gravity **14.7 BLG**
- ABV ---
- IBU **99**
- SRM **11.3**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **77C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-------------|-------|-----|
| Grain | Strzegom Monachijski typ II | 6 kg (100%) | 79 % | 22 |
| Grain | Strzegom Pszeniczny | 0 kg | 81 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Topaz | 15 g | 60 min | 16.3 % |
| Boil | Chinook | 15 g | 60 min | 12 % |
| Boil | Centennial | 10 g | 15 min | 8.5 % |
| Boil | Simcoe | 10 g | 15 min | 13.2 % |
| Boil | Ella (AUS) | 10 g | 15 min | 14.6 % |
| Boil | Centennial | 10 g | 10 min | 8.5 % |
| Boil | Topaz | 15 g | 10 min | 16.3 % |
| Boil | Chinook | 15 g | 10 min | 12 % |
| Boil | Simcoe | 10 g | 5 min | 13.2 % |
| Boil | Ella (AUS) | 10 g | 5 min | 14.6 % |
| Boil | Topaz | 20 g | 5 min | 16.3 % |
| Boil | Chinook | 20 g | 5 min | 12 % |
| Boil | Centennial | 15 g | 5 min | 8.5 % |

| | | | | |
|---------|------------|------|----------|--------|
| Boil | Centennial | 15 g | 0 min | 8.5 % |
| Dry Hop | Simcoe | 30 g | 5 day(s) | 13.2 % |
| Dry Hop | Ella (AUS) | 30 g | 5 day(s) | 14.6 % |