

Target

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **28**
- SRM **5.7**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Pilzneński | 2.5 kg (48.1%) | 81 % | 4 |
| Grain | Monachijski | 1 kg (19.2%) | 80 % | 16 |
| Grain | Strzegom Wiedeński | 1 kg (19.2%) | 79 % | 10 |
| Grain | Karmelowy Jasny 30EBC | 0.2 kg (3.8%) | 75 % | 30 |
| Grain | Płatki owsiane | 0.5 kg (9.6%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Target | 15 g | 60 min | 10 % |
| Boil | Target | 10 g | 20 min | 10 % |
| Boil | Target | 25 g | 5 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 100 ml | Safale |