

## Na oko

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **70**
- SRM **5.1**

### 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 **20.9 liter(s)**
- Total mash volume **27.8 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **79 C**, Time **15 min**

### Mash step by step

- Heat up **20.9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **79C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Pilzneński             | 4 kg (57.6%)   | 81 %  | 4   |
| Grain | Briess - Pale Ale Malt | 2 kg (28.8%)   | 80 %  | 7   |
| Grain | Pszeniczny             | 0.5 kg (7.2%)  | 85 %  | 5   |
| Grain | Płatki owsiane         | 0.45 kg (6.5%) | 85 %  | 3   |

### Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Simcoe   | 15 g   | 60 min | 13.2 %     |
| Boil    | Simcoe   | 15 g   | 20 min | 13.2 %     |
| Boil    | Citra    | 15 g   | 20 min | 12 %       |
| Boil    | Equinox  | 15 g   | 20 min | 13.1 %     |
| Boil    | Amarillo | 15 g   | 20 min | 9.5 %      |
| Boil    | Simcoe   | 15 g   | 5 min  | 13.2 %     |
| Boil    | Citra    | 15 g   | 5 min  | 12 %       |
| Boil    | Equinox  | 15 g   | 5 min  | 13.1 %     |
| Boil    | Amarillo | 15 g   | 5 min  | 9.5 %      |
| Boil    | Citra    | 30 g   | 0 min  | 12 %       |

|         |            |      |          |        |
|---------|------------|------|----------|--------|
| Boil    | Equinox    | 30 g | 0 min    | 13.1 % |
| Boil    | Amarillo   | 30 g | 0 min    | 9.5 %  |
| Boil    | Vic Secret | 30 g | 0 min    | 16.3 % |
| Dry Hop | Simcoe     | 30 g | 4 day(s) | 13.2 % |
| Dry Hop | Citra      | 30 g | 4 day(s) | 12 %   |
| Dry Hop | Amarillo   | 30 g | 4 day(s) | 9.5 %  |
| Dry Hop | Equinox    | 30 g | 4 day(s) | 13.1 % |
| Dry Hop | Vic Secret | 50 g | 4 day(s) | 16.3 % |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |