

ms

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **78**
- SRM **4.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **18 %/h**
- Boil size **36.6 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.66 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **27.5 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **73 C**, Time **10 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **73.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **73C**
- Sparge using **24.1 liter(s)** of **76C** water or to achieve **36.6 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (53.3%)  | 80 %  | 5   |
| Grain | Pszeniczny           | 2 kg (26.7%)  | 85 %  | 4   |
| Grain | Płatki pszeniczne    | 0.5 kg (6.7%) | 60 %  | 3   |
| Grain | Płatki owsiane       | 0.5 kg (6.7%) | 60 %  | 3   |
| Grain | płatki jęczmienne    | 0.5 kg (6.7%) | 60 %  | 4   |

### Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Chinook | 60 g   | 60 min   | 13 %       |
| Aroma (end of boil) | Mosaic  | 50 g   | 5 min    | 10 %       |
| Aroma (end of boil) | Simcoe  | 50 g   | 5 min    | 13.3 %     |
| Whirlpool           | Mosaic  | 50 g   | 0 min    | 10 %       |
| Whirlpool           | Simcoe  | 50 g   | 0 min    | 13.3 %     |
| Dry Hop             | Mosaic  | 100 g  | 3 day(s) | 10 %       |
| Dry Hop             | Simcoe  | 100 g  | 3 day(s) | 13.2 %     |