

## Polskie ale

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **40**
- SRM **5.2**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **16.1 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

### Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **13 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **16.1 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (81.1%)   | 80 %  | 5   |
| Grain | Viking Wheat Malt    | 0.5 kg (13.5%) | 83 %  | 5   |
| Grain | Carahell             | 0.2 kg (5.4%)  | 77 %  | 26  |

### Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 20 g   | 60 min | 7 %        |
| Boil                | Marynka           | 10 g   | 50 min | 7 %        |
| Boil                | Lublin (Lubelski) | 15 g   | 20 min | 2.6 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 15 g   | 5 min  | 2.6 %      |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 100 ml | Fermentis  |

### Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g    | Boil    | 15 min |