

## Pils

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **29**
- SRM **3.7**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **33.8 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **26.3 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount        | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Viking Pilsner malt | 7.5 kg (100%) | 82 %  | 4   |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 25 g   | 60 min | 9.1 %      |
| Boil    | Lublin (Lubelski) | 20 g   | 30 min | 5.4 %      |
| Boil    | Lublin (Lubelski) | 35 g   | 15 min | 5.4 %      |

### Yeasts

| Name        | Type  | Form | Amount | Laboratory |
|-------------|-------|------|--------|------------|
| safale s-23 | Lager | Dry  | 11.5 g | ---        |

### Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 7 g    | Boil    | 10 min |