

## Pils

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **29**
- SRM **3.9**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **28.5 liter(s)**

### Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

### Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18.9 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

### Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt          | 4.5 kg (83.3%) | 82 %  | 4   |
| Grain | Monachijski                  | 0.5 kg (9.3%)  | 80 %  | 16  |
| Grain | Briess - 2 Row Carapils Malt | 0.4 kg (7.4%)  | 75 %  | 3   |

### Hops

| Use for | Name                | Amount | Time   | Alpha acid |
|---------|---------------------|--------|--------|------------|
| Boil    | Marynka             | 15 g   | 60 min | 7.5 %      |
| Boil    | Hallertau Tradition | 30 g   | 60 min | 5 %        |
| Boil    | Hallertau Tradition | 30 g   | 5 min  | 5 %        |

### Yeasts

| Name                 | Type  | Form   | Amount | Laboratory       |
|----------------------|-------|--------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 500 ml | Fermentum Mobile |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |          |      |      |        |
|--------|----------|------|------|--------|
| Fining | Wirflook | 10 g | Boil | 15 min |
|--------|----------|------|------|--------|