

Lager

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **41**
- SRM **5.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|------------|-------|-----|
| Grain | Pilzneński | 1 kg (50%) | 81 % | 4 |
| Grain | Monachijski | 1 kg (50%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Oktawia | 25 g | 60 min | 7.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------|--------|---------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 1000 ml | Fermentum Mobile |