

# Koźlak Piwoszarnia

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **23**
- SRM **10.7**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **30.4 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **50 min** at **65C**
- Keep mash **25 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt  | 3 kg (39.5%)   | 82 %  | 4   |
| Grain | Viking Munich Malt   | 1.7 kg (22.4%) | 78 %  | 18  |
| Grain | Viking Vienna Malt   | 0.5 kg (6.6%)  | 79 %  | 7   |
| Grain | Strzegom Bursztynowy | 0.7 kg (9.2%)  | 70 %  | 49  |
| Grain | Strzegom Karmel 30   | 1.7 kg (22.4%) | 75 %  | 30  |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 25 g   | 60 min | 10 %       |
| Aroma (end of boil) | Lublin (Lubelski) | 15 g   | 10 min | 4 %        |

## Yeasts

| Name                         | Type  | Form  | Amount | Laboratory |
|------------------------------|-------|-------|--------|------------|
| WLP800 - Pilsner Lager Yeast | Lager | Slant | 200 ml | White Labs |