

# piwo 31.07.2022

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **31**
- SRM **6.5**

## 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 **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

## Steps

- Temp **62 C**, Time **10 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **10 min** at **62C**
- Keep mash **60 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

| Type  | Name          | Amount        | Yield | EBC |
|-------|---------------|---------------|-------|-----|
| Grain | Pilzneński    | 5 kg (76.9%)  | 81 %  | 4   |
| Grain | melanoidynowy | 0.5 kg (7.7%) | 75 %  | 70  |
| Grain | Wiedeński     | 1 kg (15.4%)  | 79 %  | 10  |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | lunga             | 30 g   | 60 min | 9.4 %      |
| Boil                | Cascade           | 25 g   | 15 min | 5.8 %      |
| Aroma (end of boil) | Cascade           | 5 g    | 0 min  | 5.8 %      |
| Aroma (end of boil) | Lublin (Lubelski) | 30 g   | 0 min  | 6 %        |

## Yeasts

| Name                           | Type | Form  | Amount | Laboratory |
|--------------------------------|------|-------|--------|------------|
| Lallemand - LalBrew Voss Kveik | Ale  | Slant | 100 ml | ---        |

## Extras

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

|        |             |     |      |       |
|--------|-------------|-----|------|-------|
| Fining | Whirlfloc T | 1 g | Boil | 5 min |
|--------|-------------|-----|------|-------|