

# Oszukany pils III

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **35**
- SRM **4.2**
- 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 **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **10.8 liter(s)**

## Steps

- Temp **50 C**, Time **20 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **8.4 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

| Type  | Name       | Amount        | Yield | EBC |
|-------|------------|---------------|-------|-----|
| Grain | Pilzneński | 2 kg (83.3%)  | 81 %  | 4   |
| Grain | Carahell   | 0.2 kg (8.3%) | 77 %  | 26  |
| Grain | Pszeniczny | 0.2 kg (8.3%) | 85 %  | 4   |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Mosaic  | 5 g    | 45 min | 10 %       |
| Boil                | Mosaic  | 5 g    | 15 min | 10 %       |
| Aroma (end of boil) | Ekuanot | 10 g   | 10 min | 14 %       |
| Aroma (end of boil) | Mosaic  | 10 g   | 10 min | 10 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 7 g    | Fermentis  |