

# Przeniczne

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **14**
- SRM **4**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **73 C**, Time **45 min**
- Temp **78 C**, Time **10 min**
- Temp **100 C**, Time **60 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **73C**
- Keep mash **10 min** at **78C**
- Keep mash **60 min** at **100C**
- Sparge using **22 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Słód jęczmienny crips pale ale | 3.5 kg (43.8%) | 83 %  | 4.5 |
| Grain | Słód PSZENICZNY crips 4.5      | 3.5 kg (43.8%) | 83 %  | 4.5 |
| Grain | Płatki pszeniczne              | 0.5 kg (6.3%)  | 60 %  | 3   |
| Grain | Płatki owsiane                 | 0.5 kg (6.3%)  | 60 %  | 3   |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Mandarina Bavaria | 15 g   | 10 min | 10 %       |
| Boil    | Mandarina Bavaria | 15 g   | 50 min | 10 %       |

## Yeasts

| Name                               | Type  | Form | Amount | Laboratory      |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M20 Bavarian Wheat | Wheat | Dry  | 20 g   | Mangrove Jack's |

## Extras

| Type                                | Name             | Amount | Use for | Time   |
|-------------------------------------|------------------|--------|---------|--------|
| Flavor                              | skórki mandaryny | 50 g   | Boil    | 30 min |
| Water Agent                         | Kwas cytrynowy   | 20 g   | Mash    | 0 min  |
| Water Agent                         | Kwas cytrynowy   | 10 g   | Mash    | 0 min  |
| Do zakwaszenia wody do poziomu 5 PH |                  |        |         |        |