

# Witbier ala Żywiec białe

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU ---
- SRM **3.5**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **38.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **67 C**, Time **25 min**
- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **63.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **70 min** at **64C**
- Keep mash **25 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **31 liter(s)** of **76C** water or to achieve **38.5 liter(s)** of wort

## Fermentables

| Type  | Name                                      | Amount          | Yield | EBC |
|-------|---|-----------------|-------|-----|
| Grain | Słód Pilsner®<br>2,5-4,5 EBC<br>Weyermann | 3.75 kg (49.9%) | 80 %  | 4   |
| Grain | Płatki pszeniczne                         | 3.38 kg (45%)   | 85 %  | 3   |
| Grain | Płatki owsiane                            | 0.38 kg (5.1%)  | 85 %  | 3   |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Mash    | Saaz (Czech Republic) | 30 g   | 60 min | 4.5 %      |
| Mash    | Saaz (Czech Republic) | 22.5 g | 15 min | 4.5 %      |

## Yeasts

| Name  | Type  | Form | Amount | Laboratory |
|-------|-------|------|--------|------------|
| us-05 | Wheat | Dry  | 5 g    | ---        |

## Extras

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

|       |          |        |      |        |
|-------|----------|--------|------|--------|
| Spice | kolendra | 10.5 g | Boil | 65 min |
| Spice | curacao  | 30 g   | Boil | 65 min |