

# Witbier

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **11**
- SRM **3.8**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **0 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **45 min** at **64C**
- Keep mash **0 min** at **72C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 3.5 kg (58.3%) | 81 %  | 5   |
| Grain | Pszeniczny               | 1 kg (16.7%)   | 85 %  | 4   |
| Grain | Płatki pszeniczne        | 1 kg (16.7%)   | 60 %  | 3   |
| Grain | Weyermann - Carapils     | 0.5 kg (8.3%)  | 78 %  | 4   |

## Hops

| Use for             | Name             | Amount | Time   | Alpha acid |
|---------------------|------------------|--------|--------|------------|
| Boil                | Szyszka lubelski | 30 g   | 60 min | 4 %        |
| Aroma (end of boil) | Szyszka lybelski | 30 g   | 0 min  | 4 %        |

## Yeasts

| Name               | Type  | Form   | Amount | Laboratory       |
|--------------------|-------|--------|--------|------------------|
| FM20 Białe Walonki | Wheat | Liquid | 1.5 ml | Fermentum Mobile |

## Extras

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

|             |                 |      |      |        |
|-------------|-----------------|------|------|--------|
| Spice       | Kolendra        | 30 g | Boil | 10 min |
| Flavor      | Limonka zest    | 20 g | Boil | 10 min |
| Flavor      | Pomarańcza zest | 20 g | Boil | 10 min |
| Water Agent | Kawa mlekowy 80 | 30 g | Mash | 60 min |