

# WITBIER

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **21**
- SRM **3.6**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **26.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **19.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount        | Yield | EBC |
|-------|-------------------|---------------|-------|-----|
| Grain | Pilzneński        | 3 kg (54.5%)  | 81 %  | 4   |
| Grain | Płatki pszeniczne | 2 kg (36.4%)  | 85 %  | 3   |
| Grain | Pszeniczny        | 0.5 kg (9.1%) | 85 %  | 4   |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Magnum | 15 g   | 60 min | 13.5 %     |

## Yeasts

| Name               | Type  | Form  | Amount | Laboratory       |
|--------------------|-------|-------|--------|------------------|
| FM20 Białe Walonki | Wheat | Slant | 100 ml | Fermentum Mobile |

## Extras

| Type  | Name                       | Amount | Use for | Time  |
|-------|----------------------------|--------|---------|-------|
| Spice | kolendra                   | 10 g   | Boil    | 5 min |
| Spice | skórka gorzkiej pomarańczy | 30 g   | Boil    | 5 min |

|       |                            |      |      |       |
|-------|----------------------------|------|------|-------|
| Spice | skórka słodkiej pomarańczy | 20 g | Boil | 5 min |
| Spice | trawa cytrynowa            | 10 g | Boil | 5 min |