

# Witbier

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **20**
- SRM **3.5**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **52 C**, Time **15 min**
- Temp **64 C**, Time **90 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **90 min** at **64C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount       | Yield | EBC |
|-------|-------------------|--------------|-------|-----|
| Grain | Pilzneński        | 2.5 kg (50%) | 81 %  | 4   |
| Grain | Płatki pszeniczne | 2 kg (40%)   | 85 %  | 3   |
| Grain | Płatki owsiane    | 0.5 kg (10%) | 85 %  | 3   |

## Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | East Kent Goldings | 30 g   | 60 min | 5.1 %      |
| Aroma (end of boil) | Lublin (Lubelski)  | 15 g   | 15 min | 4 %        |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale  | Dry  | 11.5 g | Fermentis  |

## Extras

| Type  | Name                       | Amount | Use for | Time   |
|-------|----------------------------|--------|---------|--------|
| Spice | Skórka gorzkiej pomarańczy | 20 g   | Boil    | 15 min |
| Spice | Skórka słodkiej pomarańczy | 20 g   | Boil    | 15 min |

|       |          |      |      |        |
|-------|----------|------|------|--------|
| Spice | Kolendra | 20 g | Boil | 15 min |
|-------|----------|------|------|--------|