

# Witbier

- Gravity **12.5 BLG**
- ABV **---**
- IBU **42**
- SRM **4.6**
- 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 **2.5 liter(s) / kg**
- Mash size **15.7 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **54 C**, Time **30 min**
- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15.7 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **30 min** at **54C**
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **22.3 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński    | 2.5 kg (39.7%) | 80 %  | 4   |
| Grain | Strzegom pszeniczny    | 1.5 kg (23.8%) | 81 %  | 6   |
| Grain | Melanoiden Malt        | 0.1 kg (1.6%)  | 80 %  | 39  |
| Grain | Zakwaszający           | 0.1 kg (1.6%)  | 75 %  | --- |
| Grain | Briess - Pale Ale Malt | 0.5 kg (7.9%)  | 80 %  | 7   |
| Grain | Płatki jęczmienne      | 0.35 kg (5.6%) | 50 %  | --- |
| Grain | Płatki pszenne         | 0.8 kg (12.7%) | 50 %  | --- |
| Grain | Płatki owsiane         | 0.45 kg (7.1%) | 50 %  | --- |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Citra             | 10 g   | 70 min | 12 %       |
| Boil    | Styrian Goldings  | 20 g   | 70 min | 4.5 %      |
| Boil    | Lublin (Lubelski) | 25 g   | 70 min | 4 %        |
| Boil    | Styrian Goldings  | 5 g    | 15 min | 4.5 %      |
| Boil    | Citra             | 10 g   | 15 min | 12 %       |

|                     |                   |      |        |       |
|---------------------|-------------------|------|--------|-------|
| Boil                | Lublin (Lubelski) | 5 g  | 15 min | 4 %   |
| Aroma (end of boil) | Citra             | 10 g | 5 min  | 12 %  |
| Aroma (end of boil) | Styrian Goldings  | 5 g  | 5 min  | 4.5 % |
| Aroma (end of boil) | Lublin (Lubelski) | 5 g  | 5 min  | 4 %   |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| s-33 | Ale  | Dry  | 11 g   | ---        |

## Extras

| Type  | Name                       | Amount | Use for | Time   |
|-------|----------------------------|--------|---------|--------|
| Spice | Curacao                    | 12 g   | Boil    | 15 min |
| Spice | Curacao                    | 12 g   | Boil    | 5 min  |
| Spice | Skórka słodkiej pomarańczy | 5 g    | Boil    | 15 min |
| Spice | Skórka słodkiej pomarańczy | 5 g    | Boil    | 5 min  |
| Spice | Kolendra                   | 5 g    | Boil    | 15 min |
| Spice | Kolendra                   | 5 g    | Boil    | 5 min  |