

# #1 Witbier Kolender

- Gravity **12.1 BLG**
- ABV ---
- IBU **15**
- SRM **4.3**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

## Steps

- Temp **45 C**, Time **30 min**
- Temp **53 C**, Time **10 min**
- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **18.6 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **30 min** at **45C**
- Keep mash **10 min** at **53C**
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name             | Amount        | Yield | EBC |
|-------|------------------|---------------|-------|-----|
| Grain | Wheat, Torrified | 2 kg (37.7%)  | 79 %  | 4   |
| Grain | Pilzneński       | 3 kg (56.6%)  | 81 %  | 4   |
| Grain | Oats, Flaked     | 0.3 kg (5.7%) | 80 %  | 2   |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Lublin (Lubelski) | 25 g   | 60 min | 5 %        |

## Yeasts

| Name                    | Type | Form | Amount | Laboratory |
|-------------------------|------|------|--------|------------|
| Classic Belgian Witbier | Ale  | Dry  | 10 g   | Gozdawa    |

## Extras

| Type  | Name     | Amount | Use for | Time  |
|-------|----------|--------|---------|-------|
| Spice | kolendra | 15 g   | Boil    | 5 min |

|       |                   |      |      |       |
|-------|-------------------|------|------|-------|
| Spice | curacao           | 20 g | Boil | 5 min |
| Other | skórka pomarańczy | 30 g | Boil | 5 min |