

# Witbier

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **15**
- SRM **3.5**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

## Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **13.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

| Type    | Name                                      | Amount         | Yield | EBC |
|---------|-------------------------------------------|----------------|-------|-----|
| Grain   | Słód Pilsner®<br>2,5-4,5 EBC<br>Weyermann | 2 kg (42.6%)   | 80 %  | 4   |
| Grain   | Płatki pszeniczne                         | 2 kg (42.6%)   | 60 %  | 3   |
| Grain   | Słód owsiany<br>Fawcett                   | 0.5 kg (10.6%) | 61 %  | 5   |
| Grain   | Weyermann -<br>Acidulated Malt            | 0.1 kg (2.1%)  | 80 %  | 6   |
| Adjunct | łuska ryżowa                              | 0.1 kg (2.1%)  | --- % | 0   |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | East Kent Goldings    | 15 g   | 55 min | 5.1 %      |
| Boil    | Saaz (Czech Republic) | 30 g   | 10 min | 4.5 %      |

## Yeasts

| Name                               | Type  | Form | Amount | Laboratory      |
|------------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's<br>M21 Belgian Wit | Wheat | Dry  | 10 g   | Mangrove Jack's |

## Extras

| Type   | Name              | Amount | Use for | Time  |
|--------|-------------------|--------|---------|-------|
| Flavor | Curacao           | 20 g   | Boil    | 0 min |
| Spice  | Kolendra Indyjska | 10 g   | Boil    | 0 min |

## Notes

- Fermentacja:  
17 -> 18,5 - 7 dni  
19,5 -> 20,5 - 6 dni  
21,5 - 5 dni  
  
nagazowanie 2,8 CO2-vol  
leżakowanie w temp. 4 C  
*Jan 3, 2025, 12:06 PM*