

## Witbier v.3

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **14**
- SRM **2.7**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **4 %/h**
- Boil size **23.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **8.2 liter(s)**
- Total mash volume **11.3 liter(s)**

### Steps

- Temp **54 C**, Time **5 min**
- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **8.2 liter(s)** of strike water to **58C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **5 min** at **54C**
- Keep mash **60 min** at **63C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

### Fermentables

| Type    | Name                  | Amount          | Yield  | EBC |
|---------|-----------------------|-----------------|--------|-----|
| Grain   | Heidelberg            | 2 kg (49.4%)    | 80.5 % | 2   |
| Adjunct | Pszenica niesłodowana | 1 kg (24.7%)    | 75 %   | 3   |
| Grain   | Pszeniczny            | 0.5 kg (12.3%)  | 85 %   | 4   |
| Grain   | Pilzneński            | 0.55 kg (13.6%) | 81 %   | 4   |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Lublin (Lubelski) | 30 g   | 60 min | 4 %        |

### Yeasts

| Name                           | Type  | Form   | Amount | Laboratory |
|--------------------------------|-------|--------|--------|------------|
| WLP400 - Belgian Wit Ale Yeast | Wheat | Liquid | 50 ml  | White Labs |

### Extras

| Type  | Name     | Amount | Use for | Time   |
|-------|----------|--------|---------|--------|
| Spice | kolendra | 15 g   | Boil    | 10 min |
| Herb  | curacao  | 15 g   | Boil    | 10 min |