

## Witbier #3

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- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **18**
- SRM **3.2**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **20.7 liter(s)**

### Steps

- Temp **53 C**, Time **15 min**
- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.1 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

### Fermentables

| Type  | Name                  | Amount         | Yield | EBC |
|-------|-----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński   | 2.5 kg (54.3%) | 80 %  | 4   |
| Grain | Pszenica niesłodowana | 1.5 kg (32.6%) | 75 %  | 3   |
| Grain | Płatki owsiane        | 0.4 kg (8.7%)  | 85 %  | 3   |
| Grain | Weyermann - Carapils  | 0.2 kg (4.3%)  | 78 %  | 4   |

### Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 15 g   | 60 min | 11 %       |

### Yeasts

| Name                       | Type  | Form   | Amount  | Laboratory       |
|----------------------------|-------|--------|---------|------------------|
| FM20 Białe Walonki starter | Wheat | Liquid | 1000 ml | Fermentum Mobile |

### Extras

| Type  | Name     | Amount | Use for | Time   |
|-------|----------|--------|---------|--------|
| Spice | Kolendra | 20 g   | Boil    | 10 min |

|        |                             |       |      |        |
|--------|-----------------------------|-------|------|--------|
| Flavor | Skórki świeżej pomarańczy 7 | 150 g | Boil | 10 min |
| Flavor | Skórki świeżej cytryny 1/2  | 15 g  | Boil | 10 min |

## Notes

- Nagazowanie 2.4. Fermentacja 19 podnoszone do 24.  
*Jul 5, 2018, 8:15 PM*