

## W019 - Witbier

- Gravity **11.5 BLG**
- ABV **5 %**
- IBU **18.7**
- SRM **5.7**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **0 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.77 liter(s)**

### Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

### Steps

- Temp **52 C**, Time **15 min**
- Temp **63 C**, Time **70 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **14.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **70 min** at **63C**
- Keep mash **10 min** at **75C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **25.77 liter(s)** of wort

### Fermentables

| Type  | Name                                  | Amount | Yield  | EBC |
|-------|---------------------------------------|--------|--------|-----|
| Grain | BEST Heidelberg (BESTMALZ)            | 2.2 kg | 83.8 % | 6   |
| Grain | Wheat, Flaked                         | 1.3 kg | 77 %   | 7   |
| Grain | BEST Heidelberg Wheat Malt (BESTMALZ) | 1 kg   | 84 %   | 7   |
| Grain | Oats, Flaked                          | 0.3 kg | 80 %   | 4   |

### Hops

| Use for | Name             | Amount | Time   | Alpha acid |
|---------|------------------|--------|--------|------------|
| Boil    | Styrian Goldings | 20 g   | 60 min | 4 %        |
| Boil    | Styrian Goldings | 30 g   | 20 min | 4 %        |

### Yeasts

| Name               | Type | Form   | Amount | Laboratory |
|--------------------|------|--------|--------|------------|
| FM20 Białe walonki | Ale  | Liquid | ml     | ---        |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|             |                     |       |      |        |
|-------------|---------------------|-------|------|--------|
| Water Agent | Lactic Acid         | 6 g   | Mash | 60 min |
| Other       | Łuska gryczna       | 150 g | Mash | 0 min  |
| Spice       | Coriander Seed      | 10 g  | Boil | 15 min |
| Spice       | Orange Peel, Bitter | 10 g  | Boil | 15 min |
| Spice       | Orange Peel, Sweet  | 10 g  | Boil | 15 min |
| Spice       | Jaśmin              | 15 g  | Boil | 5 min  |
| Spice       | Coriander Seed      | 10 g  | Boil | 3 min  |
| Spice       | Orange Peel, Bitter | 10 g  | Boil | 3 min  |
| Spice       | Orange Peel, Sweet  | 10 g  | Boil | 3 min  |