

## #18 Hoppy Witbier

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **85**
- SRM **3.9**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount          | Yield | EBC |
|-------|---------------------|-----------------|-------|-----|
| Grain | Strzegom Pilzneński | 1.25 kg (41.7%) | 80 %  | 4   |
| Grain | Płatki pszeniczne   | 1.25 kg (41.7%) | 85 %  | 3   |
| Grain | Płatki owsiane      | 0.5 kg (16.7%)  | 85 %  | 3   |

### Hops

| Use for   | Name     | Amount | Time   | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil      | Warrior  | 15 g   | 60 min | 15.5 %     |
| Boil      | Citra    | 20 g   | 15 min | 12 %       |
| Boil      | Amarillo | 20 g   | 15 min | 9.5 %      |
| Whirlpool | Citra    | 30 g   | 0 min  | 12 %       |
| Whirlpool | Amarillo | 30 g   | 0 min  | 9.5 %      |

### Yeasts

| Name               | Type  | Form   | Amount | Laboratory       |
|--------------------|-------|--------|--------|------------------|
| FM20 Białe Walonki | Wheat | Liquid | 40 ml  | Fermentum Mobile |

### Extras

| Type  | Name     | Amount | Use for | Time  |
|-------|----------|--------|---------|-------|
| Spice | Kolendra | 10 g   | Boil    | 5 min |

|       |         |      |      |       |
|-------|---------|------|------|-------|
| Spice | Curacao | 20 g | Boil | 5 min |
|-------|---------|------|------|-------|