

Witbier

- Gravity **12.2 BLG**
- ABV ---
- IBU **20**
- SRM **4**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Pilsner (2 Row) Bel | 2.3 kg (51.1%) | 79 % | 4 |
| Grain | Weyermann pszeniczny jasny | 1 kg (22.2%) | 80 % | 6 |
| Grain | płatki orkiszowe | 0.4 kg (8.9%) | 80 % | 5 |
| Grain | kasza manna | 0.4 kg (8.9%) | 80 % | 5 |
| Grain | owies N/S | 0.4 kg (8.9%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Centennial | 21 g | 60 min | 8.5 % |
| Aroma (end of boil) | Cascade | 15 g | 3 min | 6.9 % |
| Aroma (end of boil) | Cascade | 15 g | 1 min | 6.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|--------|--------|-------------|
| Wyeast - Belgian Witbier | Ale | Liquid | 11 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------|--------|---------|-------|
| Spice | kolendra | 5 g | Boil | 3 min |

| | | | | |
|--------|---------------------|------|------|-------|
| Spice | kolendra | 5 g | Boil | 1 min |
| Flavor | skórka cytrynowa | 10 g | Boil | 3 min |
| Flavor | skórka cytrynowa | 10 g | Boil | 1 min |
| Flavor | skórka pomarańczowa | 10 g | Boil | 3 min |
| Flavor | skórka pomarańczowa | 10 g | Boil | 1 min |