

Witbier #3

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **15**
- SRM **3.2**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **36 liter(s)**
- Trub loss **3 %**
- Size with trub loss **37.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **42 liter(s)**

Mash information

- Mash efficiency **75 %**
- 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 **80 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **80 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **33 liter(s)** of **76C** water or to achieve **42 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------|----------------|-------|-----|
| Grain | Pilznieński | 3.5 kg (46.7%) | 81 % | 4 |
| Grain | Pszeniczny | 1 kg (13.3%) | 85 % | 4 |
| Adjunct | Pszenica niesłodowana | 2 kg (26.7%) | 70 % | 3 |
| Adjunct | Owies niesłodowany | 1 kg (13.3%) | 70 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Cascade | 50 g | 60 min | 3.3 % |
| Aroma (end of boil) | Cascade | 50 g | 10 min | 3.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M21 Belgian Wit | Wheat | Dry | 10 g | Mangrove Jack's |
| 1l starter przygotowany rano | | | | |

Extras

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

| | | | | |
|--------|-------------------|-------|------|-------|
| Spice | Trawa Cytrynowa | 30 g | Boil | 5 min |
| Spice | Kolendra | 30 g | Boil | 5 min |
| Flavor | Skórka Cytryny | 50 g | Boil | 5 min |
| Flavor | Skórka Pomarańczy | 100 g | Boil | 5 min |