

Wit

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **13**
- SRM **3.2**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **54 C**, Time **30 min**
- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **30 min** at **54C**
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **26.2 liter(s)** of **76C** water or to achieve **34.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-------------------|----------------|-------|-----|
| Grain | Pilzneński | 2.5 kg (43.1%) | 81 % | 4 |
| Grain | Pszeniczny | 1.5 kg (25.9%) | 85 % | 4 |
| Adjunct | Płatki pszeniczne | 1 kg (17.2%) | 85 % | 3 |
| Adjunct | płatki jęczmienne | 0.4 kg (6.9%) | 85 % | 3 |
| Adjunct | Płatki owsiane | 0.4 kg (6.9%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 7.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11.5 g | Safbrew |

Extras

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

| | | | | |
|-------|-----------------------------|-----|------|--------|
| Spice | kolendra | 7 g | Boil | 15 min |
| Spice | skórka pomarańczy gorzka | 7 g | Boil | 15 min |
| Spice | skórka pomarańczy słodka | 7 g | Boil | 15 min |
| Spice | kolendra | 7 g | Boil | 5 min |
| Spice | skórka pomarańczy gorzka | 7 g | Boil | 5 min |
| Spice | skórka pomarańczy słodka | 7 g | Boil | 5 min |
| Spice | kolendra | 7 g | Boil | 0 min |
| Spice | skórka pomarańczy gorzka | 7 g | Boil | 0 min |
| Spice | skórka pomarańczy słodka | 7 g | Boil | 0 min |