

WITBIER #1 (ver.1)

- Gravity **12.6 BLG**
- ABV ---
- IBU **18**
- SRM **3.6**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.1 liter(s)**
- Total mash volume **10.8 liter(s)**

Steps

- Temp **50 C**, Time **30 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **80 C**, Time **10 min**

Mash step by step

- Heat up **8.1 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **40 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **80C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Pilzneński | 1 kg (37%) | 81 % | 4 |
| Grain | wheat | 0.5 kg (18.5%) | --- % | 4 |
| Grain | Wheat, Flaked | 0.6 kg (22.2%) | 77 % | 4 |
| Grain | Weyermann pszeniczny jasny | 0.3 kg (11.1%) | 80 % | 6 |
| Grain | owsiany | 0.25 kg (9.3%) | --- % | 4 |
| Grain | zakwaszający | 0.05 kg (1.9%) | --- % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | cascade | 13 g | 60 min | 7.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 6 g | Safbrew |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------------------|--------|---------|--------|
| Spice | kurkuma | 4.5 g | Boil | 25 min |
| Spice | rumianek w herbatce | 2 g | Boil | 15 min |
| Flavor | skórka z 1/2 cytryny | 1 g | Boil | 10 min |
| Flavor | skórka z 1 pomarańczy | 1 g | Boil | 10 min |
| Spice | kolendra indyjska | 3.75 g | Boil | 10 min |
| Flavor | skórka z 1/2 cytryny | 1 g | Boil | 5 min |
| Flavor | skórka z 1 pomarańczy | 1 g | Boil | 5 min |
| Spice | kolendra indyjska | 3.75 g | Boil | 5 min |