

Witek 03.03

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **12**
- SRM **3.6**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **55 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **4.9 liter(s)**
- Total mash volume **6.3 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **4.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------------|------------------------|----------------|-------|-----|
| Grain | Pilzneński | 1.4 kg (52.8%) | 81 % | 4 |
| Dry Extract | Ekstrakt słodowy jasny | 0.05 kg (1.9%) | 90 % | 45 |
| Adjunct | Pszenica niesłodowana | 1 kg (37.7%) | 60 % | 3 |
| Dry Extract | Maltodekstryna | 0.1 kg (3.8%) | 90 % | 5 |
| Sugar | Fructose | 0.1 kg (3.8%) | 90 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | lunga | 3 g | 60 min | 10.3 % |
| Boil | Lublin (Lubelski) | 15 g | 15 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------|-------|--------|--------|------------------|
| FM20 Białe Walonki | Wheat | Liquid | 1 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------------------------|--------|---------|-------|
| Spice | Curacao | 10 g | Boil | 5 min |
| Spice | Kolendra | 10 g | Boil | 5 min |
| Spice | Skórka słodkiej pomarańczy | 10 g | Boil | 5 min |