

American Witbier Bitewny 12 Blg

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **30**
- SRM **3.2**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.9 liter(s)**
- Total mash volume **15.3 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **11.9 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **19.8 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|---|----------------|-------|-----|
| Grain | Słód Pilsner® 2,5-4,5 EBC Weyermann | 2.3 kg (46.9%) | 80 % | 4 |
| Grain | Pszeniczny | 0.8 kg (16.3%) | 85 % | 4 |
| Adjunct | Pszenica niestodowana | 1.5 kg (30.6%) | 75 % | 3 |
| Grain | Płatki owsiane | 0.3 kg (6.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 30 g | 60 min | 4 % |
| Aroma (end of boil) | Citra | 15 g | 10 min | 13.5 % |
| Aroma (end of boil) | Amarillo | 20 g | 5 min | 9.5 % |
| Whirlpool | Amarillo | 30 g | 15 min | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------------|-------|-------|--------|------------------|
| FM20 Białe Walonki | Wheat | Slant | 100 ml | Fermentum Mobile |
|--------------------|-------|-------|--------|------------------|

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------|--------|---------|--------|
| Spice | curacao | 10 g | Boil | 10 min |
| Spice | kolendra | 10 g | Boil | 10 min |
| Spice | curacap | 10 g | Boil | 5 min |
| Spice | kolendra | 10 g | Boil | 5 min |