

#25 American Witbier

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **20**
- SRM **3**
- Style **Witbier**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **10.6 liter(s)**
- Total mash volume **13.3 liter(s)**

Steps

- Temp **64 C**, Time **70 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **10.6 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------|----------------|--------|-----|
| Grain | Pilzneński | 2 kg (43%) | 81 % | 4 |
| Adjunct | Pszenica niesłodowana | 2 kg (43%) | 75 % | 3 |
| Grain | Płatki owsiane | 0.5 kg (10.8%) | 60 % | 3 |
| Grain | Acid Malt | 0.15 kg (3.2%) | 58.7 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Wai-iti | 50 g | 60 min | 4.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------------|-------|------|--------|-----------------|
| Mangrove Jack's M21 Belgian Wit | Wheat | Dry | 11 g | Mangrove Jack's |

Extras

| Type | Name | Amount | Use for | Time |
|-------|----------|--------|---------|--------|
| Spice | Kolendra | 10 g | Boil | 10 min |

| | | | | |
|--------|------------------------------------|------|------|--------|
| Spice | Kolendra | 10 g | Boil | 3 min |
| Flavor | Skórka świeżej pomarańczy | 50 g | Boil | 10 min |
| Flavor | Skórka świeżej pomarańczy | 50 g | Boil | 3 min |
| Flavor | Skórka gorzkiej pomarańczy Curacao | 10 g | Boil | 10 min |
| Flavor | Skórka gorzkiej pomarańczy Curacao | 10 g | Boil | 3 min |
| Flavor | Skórka pomarańczy bergamotki | 10 g | Boil | 10 min |
| Flavor | Skórka pomarańczy bergamotki | 10 g | Boil | 3 min |