

## #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