

# American Witbier (TB)

- Gravity **11.4 BLG**
- ABV ---
- IBU **20**
- SRM **3.5**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

## Steps

- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **9.9 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **60 min** at **63C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (61%)	81 %	4
Grain	Pszeniczny	0.5 kg (12.2%)	85 %	4
Adjunct	Pszenica niesłodowana	0.8 kg (19.5%)	75 %	3
Grain	Owsiany	0.3 kg (7.3%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	10 g	60 min	7.7 %
Aroma (end of boil)	Cascade	15 g	10 min	7.7 %
Aroma (end of boil)	Citra	10 g	10 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M20 Bavarian Wheat	Wheat	Dry	10 g	Mangrove Jack's

## Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Spice	Curacao	10 g	Boil	10 min
Spice	Kolendra	15 g	Boil	10 min
Spice	Skórki słodkiej pomarańczy	10 g	Boil	10 min
Spice	Skórki pomarańczy bergamotki	10 g	Boil	10 min

## Notes

- Fermentacja burzliwa: 18-21 C, 10-14 dni

Butelkować z użyciem 8 g glukozy na 1l piwa  
*Jun 11, 2016, 3:12 PM*