

# Bière blanche américaine

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **9**
- SRM **3.3**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **29.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **55 C**, Time **20 min**
- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **29.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (36.4%)	80 %	4
Grain	Płatki pszeniczne	1.8 kg (32.7%)	85 %	3
Grain	Strzegom Pszeniczny	0.5 kg (9.1%)	81 %	6
Grain	Płatki owsiane	1.2 kg (21.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Citra	10 g	10 min	14.2 %
Aroma (end of boil)	Galaxy	10 g	10 min	13.3 %
Dry Hop	Citra	40 g	7 day(s)	14.2 %
Dry Hop	Galaxy	40 g	7 day(s)	13.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	200 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	skórka słodkiej pomarańczy	10 g	Boil	10 min
Spice	kolendra indyjska	5 g	Boil	10 min