

# Urodzinowy Miętowo-Cytrynowy Witbier

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **11**
- SRM **3.4**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.1 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **10.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.2 kg (41.4%)	81 %	4
Grain	Pszeniczny	1.2 kg (41.4%)	80 %	4
Grain	Oats, Flaked	0.5 kg (17.2%)	60 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	10 g	60 min	3 %
Boil	Saaz (Czech Republic)	20 g	15 min	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	1 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	Curacao	10 g	Boil	5 min

Spice	Kolendra	10 g	Boil	5 min
Spice	Mięta pieprzowa	15 g	Bottling	---
Spice	Skórka słodkiej pomarańczy	10 g	Boil	5 min
Spice	Trawa cytrynowa	7 g	Bottling	---