

# Witbier Bustrycański

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **13**
- SRM **4.6**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.2 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

- Temp **18 C**, Time **30 min**
- Temp **44 C**, Time **60 min**
- Temp **55 C**, Time **15 min**
- Temp **62 C**, Time **25 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **13.2 liter(s)** of strike water to **17.5C**
- Add grains
- Keep mash **30 min** at **18C**
- Keep mash **60 min** at **44C**
- Keep mash **15 min** at **55C**
- Keep mash **25 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód pszeniczny Viking Malt (3-6 EBC)	2.5 kg (35.7%)	65 %	4
Grain	Słód pilzneński 3-5 EBC Weyermann	3.5 kg (50%)	65 %	4
Adjunct	Płatki owsiane	0.6 kg (8.6%)	60 %	4
Adjunct	Płatki orkiszowe	0.4 kg (5.7%)	60 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	7 g	40 min	15.4 %
Aroma (end of boil)	Centennial	15 g	5 min	10.5 %
Dry Hop	Citra	10 g	35 day(s)	13.6 %
Dodane podczas zlewania na cichą				
Dry Hop	Cascade	10 g	35 day(s)	7 %

Dodane podczas zlewania na cichą

## Yeasts

Name	Type	Form	Amount	Laboratory
Drożdże FM20 Białe walonki	Wheat	Liquid	1000 ml	Fermentum Mobile

Starter  
Drożdże w fiolce (40ml) plus brzezka 8.5 BLG (~1000ml)

## Extras

Type	Name	Amount	Use for	Time
Spice	Kolendra	10 g	Boil	5 min
Flavor	Curaco	20 g	Boil	5 min
Flavor	Suszona skórka słodkiej pomarańczy	10 g	Boil	10 min
Flavor	Trawa cytrynowa	10 g	Boil	10 min