

# WITBIER v3 #106

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **20**
- SRM **4.3**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **9.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10 liter(s)**
- Boil time **90 min**
- Evaporation rate **42 %/h**
- Boil size **16.5 liter(s)**

## Mash information

- Mash efficiency **55.1 %**
- Liquor-to-grist ratio **4.08 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **12.5 liter(s)**

## Steps

- Temp **64 C**, Time **70 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **7 min**

## Mash step by step

- Heat up **10 liter(s)** of strike water to **69.4C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **7 min** at **77C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilzneński - viking	1 kg (40.7%)	80 %	4
Grain	Mep©Ale	0.2 kg (8.1%)	82.2 %	4.8
Grain	Płatki pszenne	0.9 kg (36.6%)	82 %	3
Grain	Płatki owsiane	0.3 kg (12.2%)	82 %	3
Grain	Cookie - viking	0.06 kg (2.4%)	72 %	50

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Golding	8 g	60 min	4.6 %
Aroma (end of boil)	Styrian Golding	40 g	5 min	4.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Liquid	30 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
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Water Agent	gips	1 g	Mash	---
Water Agent	sól epsom	0.5 g	Mash	---
Water Agent	kwask mlekowy [ml]	3.75 g	Mash	---
Flavor	curacao (suszone)	10 g	Boil	3 min
Flavor	kolendra mielona	15 g	Boil	3 min
Fining	mech irlandzki	2 g	Boil	5 min
Water Agent	kwask askorbinowy	1.95 g	Bottling	---
Flavor	skórka pomarańczy (świeża)	153 g	Boil	3 min