

# Litwo ojczyzno moja

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **19**
- SRM **6.6**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **75C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	1.5 kg (50%)	80 %	16
Grain	Żytni	1 kg (33.3%)	85 %	8
Grain	Płatki orkiszowe	0.5 kg (16.7%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	5 g	60 min	11 %
Whirlpool	Equinox	20 g	10 min	13.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
fm23	Ale	Slant	100 ml	---

## Notes

- Brzeczka po filtracji, temp. podnieść do 80 stopni na 20 min i dodać chmiel. Bez gotowania.  
*Jun 26, 2019, 11:57 AM*