

# Wyborcze

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **17**
- SRM **4.1**
- Style **Vienna Lager**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **47 C**, Time **14 min**
- Temp **62 C**, Time **34 min**
- Temp **72 C**, Time **34 min**
- Temp **77 C**, Time **14 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **51.5C**
- Add grains
- Keep mash **14 min** at **47C**
- Keep mash **34 min** at **62C**
- Keep mash **34 min** at **72C**
- Keep mash **14 min** at **77C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	1.5 kg (30%)	81 %	4
Grain	Weyermann - Vienna Malt	1.5 kg (30%)	81 %	8
Grain	Rahr - Premium Pilsner Malt	1.5 kg (30%)	80 %	4
Grain	Weyermann - Carapils	0.5 kg (10%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	El Dorado	14 g	60 min	11 %
Boil	Amarillo	10 g	5 min	4 %
Boil	Sybilla	10 g	5 min	3.5 %
Dry Hop	Pulawski	30 g	10 day(s)	7.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
GOZDAWA CZECH PILSN	Lager	Dry	10 g	Gozdawa
Uwodnić w temperaturze 27 stopni +- 3 stopnie				

### Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	10 min

### Notes

- Warka 12.10.2019 fermentacja 12-18 stopni  
butelkowanie 10.11.2019 - 9g glukozy /l - 6 dni w temp 18.6 stopni  
od 16.11.2019 lodówka 8-10 stopni  
*Oct 13, 2019, 7:57 PM*