

# Ponura Żniwiarka

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **14**
- SRM **4.6**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **22.3 liter(s)**

## Steps

- Temp **40 C**, Time **15 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.8 liter(s)** of strike water to **42.5C**
- Add grains
- Keep mash **15 min** at **40C**
- Keep mash **40 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann pszeniczny jasny	2 kg (44.9%)	80 %	6
Grain	Weyermann - Pilsner Malt	2 kg (44.9%)	81 %	5
Grain	Cara Blonde - Castle Malting	0.25 kg (5.6%)	78 %	20
Grain	Płatki owsiane	0.2 kg (4.5%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	20 g	50 min	4.5 %
Boil	Mandarina Bavaria	15 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Munich Classic Wheat Beer	Wheat	Dry	11 g	Lallemand

## Notes

- 40°C - tylko sód pszeniczny  
*May 13, 2022, 1:48 AM*