

# ALE ŻYTO

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **9**
- SRM **8.4**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **20.9 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **25 min**

## Mash step by step

- Heat up **20.9 liter(s)** of strike water to **72.1C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **25 min** at **78C**
- Sparge using **12.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name           | Amount        | Yield | EBC |
|-------|----------------|---------------|-------|-----|
| Grain | Munich Malt    | 5 kg (90.9%)  | 80 %  | 18  |
| Grain | Platki owsiane | 0.5 kg (9.1%) | 60 %  | 3   |

## Hops

| Use for | Name        | Amount | Time   | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil    | domowy 2022 | 30 g   | 60 min | 3 %        |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us 05 | Ale  | Dry  | 11 g   | ---        |