

## Mastne Ale próba 1-sza,

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **22**
- SRM **4.1**
- Style **Northern German Altbier**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.3 liter(s)**

### Steps

- Temp **50 C**, Time **20 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **8.8 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	1 kg (40%)	82 %	4
Grain	Cara-Pils/Dextrine	0.25 kg (10%)	72 %	4
Grain	Viking Wheat Malt	0.25 kg (10%)	83 %	5
Grain	Viking Vienna Malt	1 kg (40%)	79 %	7

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	50 min	6.7 %
Boil	Marynka	15 g	10 min	6.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa - Pure Ale Yeast 7	Ale	Dry	10 g	---