

# Marcowe Twój Browar

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- Gravity **15 BLG**
- ABV ---
- IBU **34**
- SRM **9.9**
- Style **Oktoberfest/Märzen**

## 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.9 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.2 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **45 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (35%)	79 %	10
Grain	Strzegom Monachijski typ II	2 kg (35%)	79 %	22
Grain	Strzegom Karmel 30	0.22 kg (3.8%)	75 %	30
Grain	Strzegom Monachijski typ I	1.5 kg (26.2%)	79 %	25

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	22 g	60 min	12.9 %
Boil	Saaz (Czech Republic)	22 g	20 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	25 g	0 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11 g	Saflager