

# Marcowe

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **23**
- SRM **9.4**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss --- %
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **55 C**, Time **15 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **40 min** at **64C**
- Keep mash **10 min** at **72C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski typ I	2 kg (37.7%)	74.39 %	31
Grain	Pilzneński	2 kg (37.7%)	75.29 %	7
Grain	Wiedeński	0.5 kg (9.4%)	74.39 %	17
Grain	Cara-Pils/Dextrine	0.3 kg (5.7%)	72 %	12
Grain	Carahell (Weyermann)	0.3 kg (5.7%)	75.74 %	67
Grain	Acidulated (Weyermann)	0.2 kg (3.8%)	65.2 %	8

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sladek	20 g	60 min	6 %
Boil	Saaz	20 g	15 min	4.2 %
Boil	Sladek	20 g	15 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager Lager	Lager	Dry	11 g	DCL/Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	5 g	Boil	10 min