

# Marcowe

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **28**
- SRM **11.1**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **42 liter(s)**
- Trub loss **4 %**
- Size with trub loss **43.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **49 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33.6 liter(s)**
- Total mash volume **44.8 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **33.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **26.6 liter(s)** of **76C** water or to achieve **49 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	7 kg (62.5%)	79 %	10
Grain	Strzegom Monachijski typ II	1.5 kg (13.4%)	79 %	22
Grain	Strzegom Karmel 30	0.5 kg (4.5%)	75 %	30
Grain	Carahell	1 kg (8.9%)	77 %	26
Grain	Viking melanoidynowy	0.5 kg (4.5%)	75 %	60
Grain	Acid Malt	0.5 kg (4.5%)	58.7 %	6
Grain	Strzegom Czekoladowy jasny	0.2 kg (1.8%)	68 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	45 g	60 min	9.1 %
Aroma (end of boil)	Tradition	45 g	20 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Saflager S-23	Lager	Dry	23 g	Fermentis Division of S.I.Lesaffre
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### Notes

- IBU zdecydowanie dużo niższe, niż wynika z obliczeń, nie równoważy słodowości, przy kolejnym warzeniu dodać 70g Marynki  
*May 18, 2021, 1:36 PM*