

# Marcowe 2018

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **24**
- SRM **7**
- 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 **80 min**
- Evaporation rate **12 %/h**
- Boil size **29.3 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **6 liter(s) / kg**
- Mash size **33.8 liter(s)**
- Total mash volume **39.4 liter(s)**

## Steps

- Temp **50 C**, Time **0 min**
- Temp **62 C**, Time **30 min**
- Temp **70 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **33.8 liter(s)** of strike water to **52.5C**
- Add grains
- Keep mash **0 min** at **50C**
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **1.1 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (35.5%)	80 %	4
Grain	Strzegom Monachijski typ I	2 kg (35.5%)	79 %	16
Grain	Malteurop Pale Ale	1 kg (17.8%)	79 %	6
Grain	Weyermann - Vienna Malt	0.5 kg (8.9%)	81 %	8
Grain	Strzegom Karmel 150	0.1 kg (1.8%)	75 %	130
Grain	Fawcett - Brown	0.03 kg (0.5%)	72 %	180

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Sybilla	20 g	80 min	6.5 %
Boil	Sybilla	20 g	30 min	6.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Saflager W 34/70	Lager	Slant	192.98 ml	Fermentis
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### Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	3.86 g	Boil	15 min

### Notes

- 80% wody RO (28L) + 7L kranowej  
Ca 54, Mg 11, Na 7, SO4 55, Cl 68  
ph ok 5.4  
*Jan 24, 2018, 10:57 AM*