

## Marcowe 2022\_04

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **13**
- SRM **8.7**
- Style **Oktoberfest/Märzen**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **26.3 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **67 C**, Time **45 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **20.5 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **78C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2.5 kg (42.7%)	79 %	10
Grain	Strzegom Monachijski typ I	3.1 kg (53%)	79 %	16
Grain	Strzegom Karmel 150	0.25 kg (4.3%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hersbrucker	50 g	60 min	3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Lager	Slant	100 ml	---