

# Oktoberfest-Marcowe

- Gravity **14.3 BLG**
- ABV ---
- IBU **27**
- SRM **8.8**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **73C**
- Keep mash **2 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (38.1%)	79 %	10
Grain	Strzegom Pilzneński	2 kg (38.1%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (19%)	79 %	16
Grain	Strzegom Karmel 150	0.25 kg (4.8%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	20 g	60 min	7 %
Boil	Perle	15 g	30 min	7 %
Boil	Saaz (Czech Republic)	15 g	5 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	22 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	5 min