

# Marcowe Oktoberfestbier

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- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **30**
- SRM **7.6**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **26.1 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 **20.3 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (43.1%)	81 %	4
Grain	Strzegom Monachijski typ I	2 kg (34.5%)	79 %	16
Grain	Strzegom Wiedeński	1 kg (17.2%)	79 %	10
Grain	Cara Blonde - Castle Malting	0.1 kg (1.7%)	78 %	20
Grain	Cara Gold Castlemalting	0.2 kg (3.4%)	78 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	13.5 %
Boil	Perle	20 g	15 min	7 %
Aroma (end of boil)	Perle	30 g	5 min	7 %