

# Marcowe Oktoberfestbier

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **21**
- SRM **5.9**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **500 liter(s)**
- Trub loss **5 %**
- Size with trub loss **525 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **642.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **363 liter(s)**
- Total mash volume **484 liter(s)**

## Steps

- Temp **53 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **363 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **400.1 liter(s)** of **76C** water or to achieve **642.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	86 kg (71.1%)	80 %	4
Grain	Strzegom Monachijski typ I	21 kg (17.4%)	80 %	16
Grain	Cara-Pils/Dextrine	8 kg (6.6%)	80 %	4
Grain	Caramunich® typ I	6 kg (5%)	80 %	80

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mount Hood	500 g	50 min	5.5 %
Boil	Hallertau Tradition	300 g	50 min	5 %
Boil	Hallertau Tradition	500 g	10 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
W 34/70	Lager	Dry	500 g	---