

## Marcowe (p2)

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **5**
- SRM **9.2**
- Style **Oktoberfest/Märzen**

### Batch size

- Expected quantity of finished beer **88 liter(s)**
- Trub loss **5 %**
- Size with trub loss **92.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **111.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **72.3 liter(s)**
- Total mash volume **96.4 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **72.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **63.1 liter(s)** of **76C** water or to achieve **111.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	6 kg (24.9%)	81 %	5
Grain	Weyermann - Vienna Malt	6 kg (24.9%)	81 %	8
Grain	Munich Malt	12 kg (49.8%)	80 %	18
Grain	Strzegom Barwiący	0.1 kg (0.4%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Lublin (Lubelski)	140 g	10 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP830 - German Lager Yeast	Lager	Liquid	200 ml	White Labs