

#07 Marcowe

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **21**
- SRM **5.9**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.4 liter(s)**

Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop - pilsneński	1 kg (17.5%)	80 %	4
Grain	Malteurop - pilsneński lager	1 kg (17.5%)	80 %	6
Grain	Weyermann - Carahell	0.2 kg (3.5%)	75 %	24
Grain	Słodownia Strzegom - wiedeński	2 kg (35.1%)	79 %	7
Grain	Słodownia Strzegom - monachijski I	1.5 kg (26.3%)	79 %	12

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	9.5 %
Boil	Willamette	15 g	0 min	5 %
Boil	Kazbek	12 g	5 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Saflager W34/70	Lager	Culture	275 g	---
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Extras

Type	Name	Amount	Use for	Time
Fining	Miech irlandzki	5 g	Boil	10 min