

Marcowe

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **29**
- SRM **6.7**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **19.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 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 **5 min**

Mash step by step

- Heat up **13.5 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 **5 min** at **78C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **19.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.2 kg (71.1%)	81 %	4
Grain	Monachijski	0.8 kg (17.8%)	80 %	16
Grain	Briess - Carapils Malt	0.3 kg (6.7%)	74 %	3
Grain	Caramunich® typ I	0.2 kg (4.4%)	73 %	80

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mount Hood	30 g	60 min	5.5 %
Boil	Hallertau Spalt Select	30 g	15 min	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	300 ml	Fermentis