

Marcowe

- Gravity **16.1 BLG**
- ABV ---
- IBU **35**
- SRM **10.8**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (50%)	80 %	4
Grain	Strzegom Monachijski typ I	2 kg (33.3%)	79 %	16
Grain	Strzegom Karmel 30	1 kg (16.7%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	hallertauer taurus	25 g	50 min	14 %
Dry Hop	hallertauer taurus	25 g	12 day(s)	14 %