

Marcowe

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **25**
- SRM **6.5**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **34.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **64 C**, Time **39 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **39 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **34.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (38.5%)	81 %	4
Grain	Monachijski typ II 20-25 EBC Weyermann	2 kg (30.8%)	80 %	20
Grain	Strzegom Wiedeński	1 kg (15.4%)	79 %	10
Grain	Carahell	0.5 kg (7.7%)	77 %	26
Grain	Briess - Wheat Malt, White	0.5 kg (7.7%)	85 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	7 %
Aroma (end of boil)	Hallertau Tradition	70 g	5 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
W-34/70	Lager	Dry	22 g	---