

MARCOWE

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **20**
- SRM **7.4**
- 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 **70 min**
- Evaporation rate **15 %/h**
- Boil size **27 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **22.7 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	3 kg (59.4%)	79 %	10
Grain	Strzegom Monachijski typ I	1.75 kg (34.7%)	79 %	16
Grain	Weyermann - Caraamber	0.15 kg (3%)	75 %	65
Grain	Weyermann - Acidulated Malt	0.15 kg (3%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	10.5 %
Boil	Tettnang	30 g	20 min	4.5 %