

Marcowe 1

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **22**
- SRM **8.8**
- 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 **8 %/h**
- Boil size **24.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **54 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **24.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.2 kg (43.1%)	80 %	4
Grain	Strzegom Monachijski typ I	2 kg (39.2%)	79 %	16
Grain	Strzegom Wiedeński	0.3 kg (5.9%)	79 %	10
Grain	Karmelowy Jasny 30EBC	0.3 kg (5.9%)	75 %	30
Grain	Strzegom Karmel 150	0.2 kg (3.9%)	75 %	150
Grain	Viking Melanoidynowy	0.1 kg (2%)	75 %	60

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	7.8 %
Boil	Sybilla	25 g	20 min	5.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
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w-34/70	Lager	Slant	200 ml	fermentis
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Extras

Type	Name	Amount	Use for	Time
Fining	wirflock	1 g	Boil	10 min