marcowe

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **19**
- SRM **10.6**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg *(36.4%)*	81 %	4
Grain	Strzegom Monachijski typ I	2 kg *(36.4%)*	79 %	16
Grain	Strzegom Wiedeński	1 kg *(18.2%)*	79 %	10
Grain	Strzegom Karmel 150	0.5 kg *(9.1%)*	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	50 min	10 %
Boil	Lublin (Lubelski)	20 g	20 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
s-23	Lager	Dry	10 g	---

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.