

Marcowe

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **22**
- SRM **6.9**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **27.2 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 **21.1 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (66%)	80 %	4
Grain	Strzegom Monachijski typ I	2 kg (33%)	79 %	16
Grain	Carared	0.04 kg (0.7%)	75 %	39
Adjunct	Barwiący	0.02 kg (0.3%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	30 g	60 min	7.1 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	15 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	11 g	Fermentis Division of S.I.Lesaffre

Extras

Type	Name	Amount	Use for	Time
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Fining	mech irlandzki	7.32 g	Boil	15 min
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