

Marzanna

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **25**
- SRM **4.7**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (53.6%)	80 %	4
Grain	Pszeniczny	0.5 kg (8.9%)	85 %	4
Grain	Strzegom Monachijski typ I	1 kg (17.9%)	79 %	16
Grain	Płatki owsiane	0.5 kg (8.9%)	85 %	3
Grain	Płatki orkiszowe	0.6 kg (10.7%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	25 g	60 min	7 %
Boil	Hersbrucker	25 g	60 min	3 %
Boil	Hersbrucker	25 g	5 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
w34/70	Lager	Slant	500 ml	mj