

# Smogowy marzec

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **24**
- SRM **8.1**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **31 liter(s)**

## Steps

- Temp **52 C**, Time **5 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **23.3 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	1.5 kg (19.4%)	79 %	10
Grain	Monachijski	1.5 kg (19.4%)	80 %	16
Grain	Słód Wędzony Steinbach	3.2 kg (41.3%)	80 %	5
Grain	Special B Malt	0.05 kg (0.6%)	65.2 %	315
Grain	Strzegom Pilzneński	1.3 kg (16.8%)	80 %	4
Grain	Melanoiden Malt	0.2 kg (2.6%)	80 %	39

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Hallertau	15 g	10 min	4.5 %

## Notes

- Wsypać słód do wody o temp 50 stopni, grzanie 3kw pierwsza przerwa 5 min 53 stopnie, potem grzanie od razu do 72 też 3k woda miękka orzeska  
*Jan 17, 2023, 8:45 PM*