

## MS4

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- Gravity **17.1 BLG**
- ABV ---
- IBU **83**
- SRM **36.4**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.2 liter(s)**
- Total mash volume **32.2 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

### Mash step by step

- Heat up **24.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **75C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5.6 kg (69.6%)	79 %	6
Grain	Weyermann - Carapils	0.3 kg (3.7%)	78 %	4
Grain	Strzegom Czekoladowy ciemny	0.3 kg (3.7%)	68 %	1200
Grain	Oats, Flaked	0.5 kg (6.2%)	80 %	2
Grain	Strzegom Wiedeński	1 kg (12.4%)	79 %	10
Grain	Strzegom Czekoladowy jasny	0.35 kg (4.3%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	80 g	60 min	10 %
Boil	Marynka	60 g	10 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP004 - Irish Ale Yeast	Ale	Liquid	50 ml	White Labs

### Extras

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

Type	Name	Amount	Use for	Time
Herb	mięta czekoladowa	61.67 g	Boil	10 min