

## #5 Marcowy Jurli

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **25**
- SRM **6.4**
- Style **Oktoberfest/Märzen**

### Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **1 %/h**
- Boil size **28.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **30 min**

### Mash step by step

- Heat up **18.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **30 min** at **76C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (31.7%)	79 %	10
Grain	Pilzneński	2 kg (31.7%)	81 %	4
Grain	Monachijski	2 kg (31.7%)	80 %	16
Grain	Carahell	0.2 kg (3.2%)	77 %	26
Grain	Zakwaszający	0.1 kg (1.6%)	80 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	15 g	60 min	6.6 %
Boil	Hallertau Spalt Select	20 g	60 min	5.4 %
Boil	Tradition	10 g	20 min	6.6 %
Boil	Hallertau Spalt Select	10 g	20 min	5.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Wyeast 2308 Munich Lager	Lager	Liquid	125 ml	---
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