

## Maerzen duży

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **25**
- SRM **8.3**
- Style **Oktoberfest/Märzen**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.8 liter(s) / kg**
- Mash size **14.8 liter(s)**
- Total mash volume **18.7 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **67 C**, Time **5 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **14.8 liter(s)** of strike water to **69.8C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **5 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.4 kg (61.5%)	80 %	4
Grain	Monachijski	1 kg (25.6%)	80 %	16
Grain	BESTMALZ - Best Melanoidin	0.5 kg (12.8%)	75 %	71

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	10 g	60 min	11 %
Aroma (end of boil)	Sybilla	25 g	15 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
W34/70	Lager	Dry	18 g	---