

## Classic Pils

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **23**
- SRM **4.7**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

### Steps

- Temp **54 C**, Time **5 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **8.7 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **5 min** at **54C**
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.1 kg (72.4%)	82 %	4
Grain	Heidelberg	0.4 kg (13.8%)	80.5 %	2
Grain	Monachijski typ II 20-25 EBC Weyermann	0.4 kg (13.8%)	80 %	20

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	5 g	40 min	9.4 %
Boil	Saaz (Czech Republic)	15 g	30 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	25 g	5 min	4.5 %
Dry Hop	Saaz (Czech Republic)	60 g	3 day(s)	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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WLP840 - American Lager Yeast	Lager	Slant	100 ml	White Labs
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### Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	1 g	Boil	10 min

### Notes

- Woda RO kran 1:1

do zacierania 11.5L - 2.5 ml kwas mlekowy  
do wysładzania 7 L - 3 ml kwas mlekowy  
*Feb 6, 2022, 10:54 AM*