

# FRESH COPPER LAGER

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- Gravity **11.9 BLG**
- ABV ---
- IBU **40**
- SRM **7.2**
- Style **German Pilsner (Pils)**

## 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 **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (36.4%)	81 %	4
Grain	Monachijski Ciemny Steinbach	2 kg (36.4%)	80 %	30
Grain	Viking Pale Ale malt	1 kg (18.2%)	80 %	5
Grain	Cara-Pils/Dextrine	0.5 kg (9.1%)	72 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	40 g	60 min	7 %
Boil	Saaz (Czech Republic)	20 g	15 min	4.5 %
Boil	Hallertau Spalt Select	20 g	15 min	3.4 %
Boil	Saaz (Czech Republic)	30 g	5 min	4.5 %
Boil	Hallertau Spalt Select	30 g	5 min	3.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Fermentis W-34/70	Lager	Dry	23 g	fermentis
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### Extras

Type	Name	Amount	Use for	Time
Fining	mech	5 g	Boil	15 min