

# German Lager

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- Gravity **17.1 BLG**
- ABV **5.8 %**
- IBU **22.6**
- SRM **6**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **0 %**
- Size with trub loss **40 liter(s)**
- Boil time **135 min**
- Evaporation rate **10 %/h**
- Boil size **50.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **74 C**, Time **15 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **74C**
- Sparge using **34.8 liter(s)** of **76C** water or to achieve **50.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilznieński Viking Malt	8 kg	80 %	9

## Hops

Use for	Name	Amount	Time	Alpha acid
	Marynka PL	40 g	60 min	8.8 %
	Lubelski PL	50 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis W34/70			20 g	---