

# lager

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **4.7**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.3 liter(s)**
- Total mash volume **11 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **8.3 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.2 kg (80%)	82 %	4
Grain	Viking Munich Malt	0.55 kg (20%)	78 %	18

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	5.5 g	60 min	10 %
Boil	Marynka	5.5 g	25 min	10 %
Boil	Mandarina Bavaria	5.5 g	15 min	10 %
Whirlpool	Mandarina Bavaria	11 g	30 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Lager	Dry	10 g	---