

# Lager

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **15**
- SRM **4.6**
- Style **Standard American Lager**

## Batch size

- Expected quantity of finished beer **36 liter(s)**
- Trub loss **5 %**
- Size with trub loss **37.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **45.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **27 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **27.5 liter(s)** of **76C** water or to achieve **45.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	9 kg (100%)	79 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	100 g	5 min	6 %
Aroma (end of boil)	Marynka	15 g	50 min	8.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M76 Bavarian lager	Lager	Dry	20 g	---

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	10 g	Boil	50 min