

## Lager DE 3

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **19**
- SRM **2.9**
- Style **Premium American Lager**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

### Steps

- Temp **54 C**, Time **20 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **19.3 liter(s)** of strike water to **58.8C**
- Add grains
- Keep mash **20 min** at **54C**
- Keep mash **20 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsneński Premium	5 kg (90.9%)	81 %	2.5
Grain	Weyermann - Carapils	0.5 kg (9.1%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Blanc	20 g	30 min	9.3 %
Boil	Hersbrucker	25 g	15 min	4.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	100 ml	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirflfloc	1 g	Boil	15 min