

# lager 06.2024

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- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **29**
- SRM **4.2**
- Style **Dortmunder Export**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	1 kg (14.3%)	80.5 %	4
Grain	BESTMALZ - Best Pilsen	5 kg (71.4%)	80.5 %	4
Grain	BESTMALZ - Best Vienna	0.5 kg (7.1%)	80.5 %	9
Grain	Bestmalz Carmel Pils	0.5 kg (7.1%)	75 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Hallertau Mittelfruh	20 g	40 min	3 %
Boil	Hallertau Mittelfruh	20 g	20 min	3 %
Aroma (end of boil)	Hallertau Mittelfruh	20 g	5 min	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M76 Bavarian Lager	Lager	Slant	450 ml	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	1.25 g	Boil	10 min