

Lager DE

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **18**
- SRM **3.6**
- Style **Vienna 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 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.99 kg (90.9%)	81 %	4
Grain	Bestmalz Carmel Pils	0.51 kg (9.1%)	75 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Brewers Gold	25 g	35 min	7.6 %
Aroma (end of boil)	Hersbrucker	25 g	10 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	10.99 g	Fermentis Division of S.I.Lesaffre