

Lager kombi

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **22**
- SRM **4.6**
- Style **Standard 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 **5 %/h**
- Boil size **27.7 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 **67 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.5 kg (81.8%)	82 %	4
Grain	Viking Munich Malt	1 kg (18.2%)	78 %	18

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	30 min	8.8 %
Boil	Saaz (Czech Republic)	30 g	10 min	3.2 %
Boil	Hallertau Blanc	20 g	10 min	8.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
w34/70	Lager	Liquid	400 ml	saflager