

# Lager

- Gravity **9.7 BLG**
- ABV ---
- IBU **42**
- SRM **3.3**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **29 liter(s)**
- Trub loss **10 %**
- Size with trub loss **31.9 liter(s)**
- Boil time **75 min**
- Evaporation rate **8 %/h**
- Boil size **35.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **64 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **25.1 liter(s)** of **76C** water or to achieve **35.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (100%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	75 min	8 %
Boil	Marynka	30 g	45 min	8 %
Boil	Lublin (Lubelski)	30 g	15 min	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Dry	10 g	Mangrove Jack's

## Notes

- Warka 5/1  
warzenie: 31.01.2016  
objętość warki w czasie fermentacji: 15l  
Blg pocz.: 11  
fermentacja dolna: 10-15 st. C.  
warka została podzielona na dwie części.  
*Feb 7, 2016, 3:49 PM*