

# German Lager

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- Gravity **17.1 BLG**
- ABV **5.8 %**
- IBU **22.6**
- SRM **6**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **0 %**
- Size with trub loss **40 liter(s)**
- Boil time **135 min**
- Evaporation rate **10 %/h**
- Boil size **50.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **74 C**, Time **15 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **60 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **74C**
- Sparge using **34.8 liter(s)** of **76C** water or to achieve **50.8 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount | Yield | EBC |
|-------|--------------------------------|--------|-------|-----|
| Grain | Słód Pilzneński<br>Viking Malt | 8 kg   | 80 %  | 9   |

## Hops

| Use for | Name        | Amount | Time   | Alpha acid |
|---------|-------------|--------|--------|------------|
|         | Marynka PL  | 40 g   | 60 min | 8.8 %      |
|         | Lubelski PL | 50 g   | 15 min | 4 %        |

## Yeasts

| Name             | Type | Form | Amount | Laboratory |
|------------------|------|------|--------|------------|
| Fermentis W34/70 |      |      | 20 g   | ---        |