

# ZWIK Lager

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **53**
- SRM **5**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.3 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.3 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **57C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **24.3 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt   | 3.9 kg (73.6%) | 80 %  | 5   |
| Grain | Viking Munich Malt     | 0.8 kg (15.1%) | 78 %  | 18  |
| Grain | Briess - Carapils Malt | 0.6 kg (11.3%) | 74 %  | 3   |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Magnum            | 30 g   | 60 min | 13.5 %     |
| Aroma (end of boil) | Lublin (Lubelski) | 30 g   | 10 min | 4 %        |

## Yeasts

| Name             | Type  | Form  | Amount | Laboratory |
|------------------|-------|-------|--------|------------|
| Saflager W 34/70 | Lager | Slant | 200 ml | ---        |