

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	---