

Lager orkiszowy

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **18**
- SRM **4**
- Style **Vienna Lager**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **18.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **15.5 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **78C**
- Sparge using **2.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (48.4%)	80 %	5
Grain	Słód orkiszowy	1.5 kg (48.4%)	80 %	4
Grain	Acid Malt	0.1 kg (3.2%)	58.7 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	25 g	60 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	18 g	Fermentis Division of S.I.Lesaffre