

Pseudonim LUTRA lager

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **41**
- SRM **4.4**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 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 **17.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (80%)	81 %	4
Grain	Strzegom Monachijski typ I	1 kg (20%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Aroma (end of boil)	lunga	30 g	0 min	11 %
Whirlpool	Cascade PL	45 g	20 min	5.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Voss Kveik	Ale	Dry	11.5 g	Lallemand