

# Rice lager with lutra - bez chmielenia na zimno

- Gravity **8.8 BLG**
- ABV **3.4 %**
- IBU **25**
- SRM **3.3**
- Style **Lite American Lager**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **16.4 liter(s)**

## Steps

- Temp **40 C**, Time **1 min**
- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **12.8 liter(s)** of strike water to **42.9C**
- Add grains
- Keep mash **1 min** at **40C**
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **77C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (54.8%)	80 %	5
Grain	Rice, Flaked	1.5 kg (41.1%)	70 %	2
Grain	Karmelowy Jasny 30EBC	0.15 kg (4.1%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	15 g	60 min	4.7 %
Whirlpool	Galaxy	15 g	20 min	14.5 %
Whirlpool	Cascade	25 g	20 min	7.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM704	Ale	Slant	200 ml	---