

# Lutra PPA

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **32**
- SRM **4.7**

## Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **41.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **47.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.8 liter(s)**
- Total mash volume **41 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **4 min**

## Mash step by step

- Heat up **30.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **4 min** at **76C**
- Sparge using **27.1 liter(s)** of **76C** water or to achieve **47.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	8 kg (78%)	80 %	5
Grain	Płatki owsiane	2 kg (19.5%)	60 %	3
Grain	Karmelowy Czerwony	0.25 kg (2.4%)	75 %	59

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Vermelho	50 g	60 min	9 %
Aroma (end of boil)	Vermelho	150 g	2 min	9 %
Dry Hop	Vermelho	100 g	3 day(s)	9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Ale	Slant	400 ml	Omega