

Lutra APA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **37**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **30 min**
- Evaporation rate **12 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **27.9 liter(s)**

Steps

- Temp **64.5 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **23.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **64.5C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (84.2%)	80 %	5
Grain	Castlemalting - Cara Clair	0.3 kg (6.3%)	78 %	4
Grain	Barley, Flaked	0.3 kg (6.3%)	70 %	4
Grain	Special W Weyermann	0.05 kg (1.1%)	73 %	300
Sugar	cukier	0.1 kg (2.1%)	99 %	1

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	30 min	12.7 %
Boil	Amarillo	30 g	10 min	9.5 %
Boil	Willamette	50 g	10 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Ale	Slant	150 ml	Omega