

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 |