

AUPA

- Gravity **12.9 BLG**
- ABV ---
- IBU **40**
- SRM **8.2**
- Style **American Pale Ale**

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 **27.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (96.2%) | 80 % | 5 |
| Grain | Strzegom Karmel 150 | 0.2 kg (3.8%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------------|--------|--------|------------|
| Boil | Enigma (AUS) | 20 g | 20 min | 17.2 % |
| Boil | Enigma (AUS) | 20 g | 10 min | 17.2 % |
| Boil | Enigma (AUS) | 10 g | 5 min | 17.2 % |
| Whirlpool | Enigma (AUS) | 50 g | 30 min | 17.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |