

Sesion apa

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **43**
- SRM **3.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.5 kg (83.3%) | 80 % | 5 |
| Grain | Pszeniczny | 0.5 kg (16.7%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 5 g | 30 min | 16.5 % |
| Boil | Cascade | 20 g | 20 min | 7.8 % |
| Whirlpool | Cascade | 30 g | 20 min | 7.8 % |
| Dry Hop | Cascade | 50 g | 3 day(s) | 7.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 100 g | --- |