

Apa srapa

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **44**
- SRM **3.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **24.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **68 C**, Time **80 min**

Mash step by step

- Heat up **12.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **80 min** at **68C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1 kg (25%) | 80 % | 5 |
| Grain | Simpsons - Maris Otter | 1.7 kg (42.5%) | 81 % | 3 |
| Grain | Żytni | 1 kg (25%) | 85 % | 6 |
| Grain | Płatki owsiane | 0.3 kg (7.5%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 5 g | 60 min | 13.9 % |
| Boil | Strata | 5 g | 60 min | 15.3 % |
| Aroma (end of boil) | Strata | 10 g | 10 min | 15.3 % |
| Aroma (end of boil) | Citra | 10 g | 10 min | 13.2 % |
| Aroma (end of boil) | Strata | 10 g | 3 min | 15.3 % |
| Aroma (end of boil) | Citra | 10 g | 3 min | 13.2 % |
| Whirlpool | Strata | 10 g | 15 min | 15.3 % |
| Whirlpool | Citra | 10 g | 15 min | 13.2 % |
| Dry Hop | Strata | 20 g | 5 day(s) | 15.3 % |
| Dry Hop | Citra | 20 g | 5 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|-------------|-------------|---------------|-------------------|
| Lallemand - LalBrew Voss Kveik | Ale | Slant | 200 ml | Lallemand |