

Pipa

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **23**
- SRM **5.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **16.1 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **11.5 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (65.2%) | 80 % | 5 |
| Grain | Słód pszeniczny | 1 kg (21.7%) | 82 % | 4 |
| Grain | Płatki pszeniczne | 0.3 kg (6.5%) | 60 % | 3 |
| Grain | Płatki owsiane | 0.3 kg (6.5%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Chinook | 8 g | 60 min | 10 % |
| Boil | Citra | 8 g | 30 min | 12.9 % |
| Whirlpool | Chinook | 8 g | 0 min | 10 % |
| Dry Hop | Citra | 8 g | 3 day(s) | 12.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale | Dry | 10 g | Fermentis |