

Apka

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **40**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **0 min** at **76C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **19.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3.5 kg (83.3%) | 70 % | 5 |
| Grain | Pszeniczny | 0.3 kg (7.1%) | 70 % | 4 |
| Grain | Płatki owsiane | 0.4 kg (9.5%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil | lunga | 15 g | 60 min | 11 % |
| Boil | Citra | 10 g | 15 min | 12 % |
| Boil | Mosaic | 10 g | 15 min | 10 % |
| Aroma (end of boil) | Citra | 10 g | 0 min | 12 % |
| Aroma (end of boil) | Mosaic | 10 g | 0 min | 10 % |
| Whirlpool | Citra | 10 g | 0 min | 12 % |
| Whirlpool | Mosaic | 10 g | 0 min | 10 % |
| Dry Hop | Citra | 20 g | 5 day(s) | 12 % |
| Dry Hop | Mosaic | 20 g | 5 day(s) | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------|-----|-----|--------|-----|
| us-05 | Ale | Dry | 11.5 g | --- |
|-------|-----|-----|--------|-----|