

APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **40**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **13.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **2 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2 kg (44.4%) | 80 % | 5 |
| Grain | Pszeniczny | 0.5 kg (11.1%) | 85 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (11.1%) | 79 % | 16 |
| Grain | płatki jęczmienne | 1 kg (22.2%) | 60 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (11.1%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil | Marynka | 20 g | 60 min | 10 % |
| Whirlpool | Chinook pl | 10 g | 15 min | 7.5 % |
| Whirlpool | Mosaic | 10 g | 15 min | 10 % |
| Whirlpool | Citra | 10 g | 15 min | 12 % |
| Dry Hop | Citra | 30 g | 6 day(s) | 12 % |
| Dry Hop | Mosaic | 30 g | 6 day(s) | 10 % |
| Dry Hop | Chinook | 30 g | 6 day(s) | 13 % |

Yeasts

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

| | | | | |
|-------|-----|-----|------|-----------|
| us-05 | Ale | Dry | 11 g | fermentis |
|-------|-----|-----|------|-----------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|---------|--------|
| Fining | Whirlfloc T | 1.25 g | Boil | 10 min |