

# Apa#1

---

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **32**
- SRM **4.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **68 C**, Time **10 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **14.7 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **10 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Viking Pilsner malt         | 2 kg (47.6%)  | 82 %  | 4   |
| Grain | Viking Pale Ale malt        | 1 kg (23.8%)  | 80 %  | 5   |
| Grain | Strzegom Monachijski typ II | 1 kg (23.8%)  | 79 %  | 22  |
| Grain | Pszeniczny                  | 0.2 kg (4.8%) | 85 %  | 4   |

## Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Chinook | 20 g   | 60 min   | 7.6 %      |
| Boil                | Chinook | 10 g   | 30 min   | 7.6 %      |
| Boil                | Cascade | 15 g   | 15 min   | 7.1 %      |
| Aroma (end of boil) | Cascade | 10 g   | 5 min    | 7.1 %      |
| Aroma (end of boil) | Cascade | 10 g   | 0 min    | 6 %        |
| Aroma (end of boil) | Citra   | 10 g   | 0 min    | 12 %       |
| Dry Hop             | Cascade | 20 g   | 6 day(s) | 7.1 %      |
| Dry Hop             | Citra   | 20 g   | 6 day(s) | 12 %       |

|         |          |      |          |       |
|---------|----------|------|----------|-------|
| Dry Hop | Amarillo | 15 g | 6 day(s) | 9.5 % |
|---------|----------|------|----------|-------|

## Yeasts

| Name   | Type | Form | Amount | Laboratory |
|--------|------|------|--------|------------|
| s - 05 | Ale  | Dry  | 11.5 g | fermentis  |