

# APA V1

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **30**
- SRM **11.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (87.7%)  | 80 %  | 5   |
| Grain | Pszeniczny           | 0.5 kg (8.8%) | 85 %  | 4   |
| Grain | Carafa               | 0.2 kg (3.5%) | 70 %  | 664 |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Amarillo | 20 g   | 40 min   | 9.5 %      |
| Aroma (end of boil) | Amarillo | 20 g   | 10 min   | 9.5 %      |
| Aroma (end of boil) | Simcoe   | 20 g   | 5 min    | 13.2 %     |
| Aroma (end of boil) | Amarillo | 10 g   | 5 min    | 9.5 %      |
| Aroma (end of boil) | Simcoe   | 10 g   | 1 min    | 13.2 %     |
| Dry Hop             | Simcoe   | 20 g   | 5 day(s) | 13.2 %     |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |