

## APA #1

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **37**
- SRM **4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount       | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.8 kg (96%) | 80 %  | 5   |
| Grain | Pszeniczny           | 0.2 kg (4%)  | 85 %  | 4   |

### Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Simcoe   | 15 g   | 60 min   | 11.5 %     |
| Boil                | Simcoe   | 20 g   | 30 min   | 11.5 %     |
| Aroma (end of boil) | Amarillo | 30 g   | 0 min    | 7.1 %      |
| Dry Hop             | Amarillo | 30 g   | 3 day(s) | 7.1 %      |
| Dry Hop             | Citra    | 20 g   | 3 day(s) | 12.5 %     |

### Yeasts

| Name                 | Type | Form   | Amount | Laboratory       |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Liquid | 150 ml | Fermentum Mobile |