

## APA #4

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- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **36**
- SRM **7.6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**

### Mash step by step

- Heat up **18.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (80.6%)  | 80 %  | 5   |
| Grain | Strzegom Bursztynowy | 1 kg (16.1%)  | 70 %  | 49  |
| Grain | Carahell             | 0.2 kg (3.2%) | 77 %  | 26  |

### Hops

| Use for   | Name    | Amount | Time     | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil      | Simcoe  | 30 g   | 60 min   | 11.7 %     |
| Boil      | Taiheke | 30 g   | 5 min    | 6.7 %      |
| Whirlpool | Taiheke | 60 g   | 0 min    | 6.7 %      |
| Dry Hop   | Taiheke | 90 g   | 3 day(s) | 6.7 %      |

### Yeasts

| Name        | Type | Form  | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale K-97 | Ale  | Slant | 200 ml | Fermentis  |