

## APA3

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **35**
- SRM **4.6**
- 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 **27.5 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **13.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 2 kg (45.5%)  | 80 %  | 5   |
| Grain | Caramunich® typ I    | 0.2 kg (4.5%) | 73 %  | 80  |
| Grain | Weyermann - Carapils | 0.2 kg (4.5%) | 78 %  | 4   |
| Grain | Viking Pilsner malt  | 2 kg (45.5%)  | 82 %  | 4   |

### Hops

| Use for | Name    | Amount | Time     | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil    | Chinook | 15 g   | 60 min   | 13 %       |
| Boil    | Chinook | 15 g   | 15 min   | 13 %       |
| Dry Hop | Chinook | 20 g   | 3 day(s) | 13 %       |
| Dry Hop | Cascade | 50 g   | 3 day(s) | 6 %        |
| Dry Hop | Simcoe  | 40 g   | 3 day(s) | 13.2 %     |
| Boil    | Simcoe  | 10 g   | 10 min   | 13.2 %     |

### Yeasts

| Name                           | Type | Form | Amount | Laboratory |
|--------------------------------|------|------|--------|------------|
| Lallemand - LalBrew Voss Kveik | Ale  | Dry  | 11 g   | Lallemand  |