

# Single Hop APA - Enigma

- Gravity **13.3 BLG**
- ABV ---
- IBU **51**
- SRM **4.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **15.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **79 C**, Time **10 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **79C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **15.6 liter(s)** of wort

## Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt         | 2.5 kg (83.3%) | 80 %  | 5   |
| Grain | Weyermann - Rye Malt         | 0.2 kg (6.7%)  | 85 %  | 7   |
| Grain | Weyermann - Dark Wheat Malt  | 0.1 kg (3.3%)  | 85 %  | 14  |
| Grain | Weyermann - Diastatic Barley | 0.2 kg (6.7%)  | 78 %  | 4   |

## Hops

| Use for             | Name         | Amount | Time     | Alpha acid |
|---------------------|--------------|--------|----------|------------|
| Boil                | Enigma (AUS) | 5 g    | 60 min   | 17.2 %     |
| Boil                | Enigma (AUS) | 10 g   | 20 min   | 17.2 %     |
| Aroma (end of boil) | Enigma (AUS) | 10 g   | 10 min   | 17.2 %     |
| Aroma (end of boil) | Enigma (AUS) | 5 g    | 5 min    | 17.2 %     |
| Dry Hop             | Enigma (AUS) | 20 g   | 7 day(s) | 17.2 %     |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|              |     |     |       |        |
|--------------|-----|-----|-------|--------|
| Safale US-05 | Ale | Dry | 5.5 g | Safale |
|--------------|-----|-----|-------|--------|