

# APA

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **20**
- SRM **3.8**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount       | Yield | EBC |
|-------|---------------------------|--------------|-------|-----|
| Grain | Bestmalz - Pale Ale       | 3.4 kg (85%) | --- % | 6   |
| Grain | Bestmalz Pszeniczny Jasny | 0.4 kg (10%) | --- % | 5   |
| Grain | Viking Malt Cara Body     | 0.2 kg (5%)  | --- % | 8   |

## Hops

| Use for | Name               | Amount | Time     | Alpha acid |
|---------|--------------------|--------|----------|------------|
| Boil    | Lunga              | 16 g   | 60 min   | 11 %       |
| Dry Hop | Casade - USA       | 50 g   | 3 day(s) | 12.4 %     |
| Dry Hop | Experimental 09326 | 50 g   | 3 day(s) | 4.8 %      |

## Yeasts

| Name                              | Type | Form | Amount | Laboratory      |
|-----------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale  | Dry  | 10 g   | Mangrove Jack's |