

# APA

---

- Gravity **11.9 BLG**
- ABV ---
- IBU **34**
- SRM **5.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

## Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

## Steps

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

## Mash step by step

- Heat up **12.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **20.5 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

## Fermentables

| Type  | Name               | Amount         | Yield | EBC |
|-------|--------------------|----------------|-------|-----|
| Grain | Pilzneński         | 3.8 kg (88.4%) | 81 %  | 4   |
| Grain | Melanoiden Malt    | 0.25 kg (5.8%) | 80 %  | 39  |
| Grain | Strzegom Karmel 30 | 0.25 kg (5.8%) | 75 %  | 30  |

## Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Chinook    | 15 g   | 60 min | 13.4 %     |
| Aroma (end of boil) | Mosaic     | 10 g   | 15 min | 12 %       |
| Aroma (end of boil) | Cascade    | 10 g   | 15 min | 7 %        |
| Aroma (end of boil) | Mosaic     | 10 g   | 5 min  | 12 %       |
| Aroma (end of boil) | Cascade    | 10 g   | 5 min  | 6 %        |
| Aroma (end of boil) | Centennial | 25 g   | 0 min  | 10.5 %     |
| Aroma (end of boil) | Cascade    | 25 g   | 0 min  | 6 %        |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| us   | Ale  | Dry  | 11 g   | ---        |