

# APA

- Gravity **13.2 BLG**
- ABV ---
- IBU **29**
- SRM **9.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.9 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

| Type  | Name                          | Amount        | Yield | EBC |
|-------|-------------------------------|---------------|-------|-----|
| Grain | Briess - Pale Ale Malt        | 5 kg (87.7%)  | 80 %  | 7   |
| Grain | Weyermann<br>pszeniczny jasny | 0.4 kg (7%)   | 80 %  | 6   |
| Grain | Strzegom Karmel<br>150        | 0.3 kg (5.3%) | 75 %  | 150 |

## Hops

| Use for   | Name       | Amount | Time     | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil      | Mosaic     | 20 g   | 60 min   | 10 %       |
| Boil      | Centennial | 20 g   | 20 min   | 9.4 %      |
| Whirlpool | Centennial | 20 g   | 0 min    | 9.4 %      |
| Dry Hop   | Mosaic     | 10 g   | 7 day(s) | 10 %       |
| Dry Hop   | Citra      | 30 g   | 5 day(s) | 12 %       |
| Dry Hop   | Centennial | 20 g   | 3 day(s) | 10.5 %     |

## Yeasts

| Name        | Type | Form   | Amount | Laboratory |
|-------------|------|--------|--------|------------|
| Safale S-04 | Ale  | Liquid | 250 ml | Safale     |

## Extras

| Type   | Name       | Amount | Use for | Time   |
|--------|------------|--------|---------|--------|
| Fining | irish moss | 5 g    | Boil    | 15 min |