

# Apache

- Gravity **19.1 BLG**
- ABV ---
- IBU **59**
- SRM **7.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **7 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **19.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

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

## Mash step by step

- Heat up **21 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **4.5 liter(s)** of **76C** water or to achieve **19.5 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount       | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pale Ale   | 5 kg (83.3%) | 79 %  | 6   |
| Grain | Strzegom Pszeniczny | 1 kg (16.7%) | 81 %  | 5   |

## Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Chinook | 30 g   | 60 min   | 12.8 %     |
| Aroma (end of boil) | Citra   | 10 g   | 10 min   | 12.4 %     |
| Aroma (end of boil) | Equinox | 10 g   | 10 min   | 13.4 %     |
| Aroma (end of boil) | Mosaic  | 10 g   | 10 min   | 12.4 %     |
| Dry Hop             | Citra   | 20 g   | 7 day(s) | 12.4 %     |
| Dry Hop             | Equinox | 20 g   | 7 day(s) | 13.4 %     |
| Dry Hop             | Mosaic  | 20 g   | 7 day(s) | 12.4 %     |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | ---        |