

# American Pale Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **5.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **5 %/h**
- Boil size **29.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **24.9 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.6 liter(s)** of strike water to **72.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt        | 3 kg (56.6%)  | 80 %  | 5   |
| Grain | Strzegom Wiedeński          | 1 kg (18.9%)  | 79 %  | 10  |
| Grain | Strzegom Monachijski typ II | 1 kg (18.9%)  | 79 %  | 22  |
| Grain | Płatki owsiane              | 0.3 kg (5.7%) | 85 %  | 3   |

## Hops

| Use for | Name                   | Amount | Time     | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 20 g   | 60 min   | 17 %       |
| Boil    | Citra                  | 20 g   | 10 min   | 12 %       |
| Dry Hop | Citra                  | 20 g   | 7 day(s) | 12 %       |
| Dry Hop | Citra                  | 20 g   | 3 day(s) | 12 %       |

## Yeasts

| Name                           | Type | Form  | Amount | Laboratory |
|--------------------------------|------|-------|--------|------------|
| WLP090 - San Diego Super Yeast | Ale  | Slant | 150 ml | White Labs |