

# Cascade Pale Ale

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **36**
- SRM **5.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24.4 liter(s)**
- Total mash volume **30.6 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **24.4 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount          | Yield | EBC |
|-------|--------------------------|-----------------|-------|-----|
| Grain | Strzegom Pale Ale        | 0.83 kg (13.6%) | 79 %  | 6   |
| Grain | Strzegom Pilzneński      | 1.5 kg (24.5%)  | 80 %  | 4   |
| Grain | Strzegom Pszeniczny      | 1 kg (16.4%)    | 81 %  | 6   |
| Grain | Karmelowy Jasny<br>30EBC | 0.28 kg (4.6%)  | 75 %  | 30  |
| Grain | Strzegom Wiedeński       | 2.5 kg (40.9%)  | 79 %  | 10  |

## Hops

| Use for   | Name       | Amount | Time     | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil      | Cascade    | 20 g   | 10 min   | 6 %        |
| Boil      | Centennial | 30 g   | 60 min   | 10.5 %     |
| Whirlpool | Cascade    | 15 g   | 15 min   | 6 %        |
| Dry Hop   | Cascade    | 20 g   | 5 day(s) | 6 %        |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 7 g    | Fermentis  |