

# American Cascade Pale Ale 13BLG

- Gravity **10 BLG**
- ABV **4 %**
- IBU **43**
- SRM **9.5**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **34.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.5 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **23.7 liter(s)** of **76C** water or to achieve **34.4 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount          | Yield | EBC |
|-------|-----------------------------|-----------------|-------|-----|
| Grain | Strzegom Pale Ale           | 2.5 kg (46.5%)  | 79 %  | 6   |
| Grain | Strzegom Wiedeński          | 1.25 kg (23.2%) | 79 %  | 10  |
| Grain | Monachijski                 | 1.25 kg (23.2%) | 80 %  | 16  |
| Grain | Caramel/Crystal Malt - 120L | 0.38 kg (7.1%)  | 72 %  | 236 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Cascade | 50 g   | 60 min | 6 %        |
| Boil    | Cascade | 12 g   | 30 min | 6 %        |
| Boil    | Cascade | 12 g   | 15 min | 6 %        |
| Boil    | Cascade | 30 g   | 10 min | 6 %        |
| Boil    | Cascade | 12 g   | 5 min  | 6 %        |
| Boil    | Cascade | 12 g   | 1 min  | 6 %        |

## Yeasts

| Name            | Type | Form  | Amount | Laboratory |
|-----------------|------|-------|--------|------------|
| Fermentis US-05 | Ale  | Slant | 100 ml | Safale     |