

# CASCADE US

- Gravity **14 BLG**
- ABV ---
- IBU **40**
- SRM **11.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **54 C**, Time **10 min**
- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **19.3 liter(s)** of strike water to **58.8C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **60 min** at **68C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount        | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale          | 3 kg (54.5%)  | 79 %  | 6   |
| Grain | Strzegom Monachijski typ I | 1 kg (18.2%)  | 79 %  | 16  |
| Grain | Strzegom Wiedeński         | 1 kg (18.2%)  | 79 %  | 10  |
| Grain | Carawheat (GR)             | 0.5 kg (9.1%) | 68 %  | 79  |

## Hops

| Use for   | Name    | Amount | Time     | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil      | Marynka | 30 g   | 60 min   | 10 %       |
| Boil      | Cascade | 30 g   | 10 min   | 6 %        |
| Boil      | Cascade | 30 g   | 0 min    | 6 %        |
| Whirlpool | Cascade | 30 g   | 5 min    | 6 %        |
| Dry Hop   | Cascade | 30 g   | 5 day(s) | 6 %        |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |