

American Cascade Pale Ale 2020

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **38**
- SRM **8.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.5 kg (52.1%) | 80 % | 5 |
| Grain | Strzegom Wiedeński | 1 kg (20.8%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ I | 1 kg (20.8%) | 79 % | 16 |
| Grain | Strzegom Karmel 150 | 0.3 kg (6.3%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Cascade | 30 g | 60 min | 6 % |
| Boil | Cascade | 30 g | 30 min | 6 % |
| Boil | Cascade | 20 g | 5 min | 6 % |
| Dry Hop | Cascade | 50 g | 7 day(s) | 6 % |