

Cascade PL Ale

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **31**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1.5 kg (42.9%) | 80 % | 5 |
| Grain | Viking Pilsner malt | 1.5 kg (42.9%) | 82 % | 4 |
| Grain | Viking Wheat Malt | 0.5 kg (14.3%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Cascade PL | 15 g | 60 min | 5.5 % |
| Boil | Cascade PL | 20 g | 20 min | 5.5 % |
| Aroma (end of boil) | Cascade PL | 20 g | 8 min | 5.5 % |
| Dry Hop | Cascade PL | 45 g | 5 day(s) | 5.5 % |
| Dry Hop | Cascade PL | 50 g | 3 day(s) | 5.2 % |

Yeasts

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