

SH Cascade

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **29**
- SRM **3.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **11.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **76C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 1.5 kg (39.5%) | 82 % | 4 |
| Grain | Viking Pale Ale malt | 1.5 kg (39.5%) | 80 % | 5 |
| Grain | Platki owsiane | 0.8 kg (21.1%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Cascade PL | 25 g | 60 min | 5.2 % |
| Boil | Cascade PL | 30 g | 20 min | 5.2 % |
| Aroma (end of boil) | Cascade PL | 25 g | 0 min | 5.2 % |
| Dry Hop | Cascade PL | 20 g | 3 day(s) | 5.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-----------------|--------|---------|--------|
| Spice | Trawa cytrynowa | 10 g | Boil | 55 min |