

Kaskada

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **37**
- SRM **5.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (62.5%) | 80 % | 5 |
| Grain | Viking Vienna Malt | 1 kg (15.6%) | 79 % | 7 |
| Grain | Viking Munich Malt | 1 kg (15.6%) | 78 % | 18 |
| Grain | Carabelge | 0.2 kg (3.1%) | 80 % | 30 |
| Grain | Pszeniczny | 0.2 kg (3.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Cascade | 25 g | 60 min | 6 % |
| Boil | Cascade | 20 g | 30 min | 6 % |
| Boil | Cascade | 15 g | 20 min | 6 % |
| Boil | Cascade | 30 g | 10 min | 6 % |
| Boil | Cascade | 20 g | 5 min | 6 % |
| Aroma (end of boil) | Cascade | 35 g | 0 min | 6 % |
| Dry Hop | Cascade | 40 g | 7 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------|-----|-----|--------|-----|
| US-05 | Ale | Dry | 11.5 g | --- |
|-------|-----|-----|--------|-----|