

APA_2

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **41**
- SRM **6.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **19.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (78.1%) | 85 % | 7 |
| Grain | Caramel Pale Viking | 0.4 kg (6.3%) | 72 % | 8 |
| Grain | Cookie Viking Malt | 0.5 kg (7.8%) | 72 % | 50 |
| Grain | Platki owsiane | 0.5 kg (7.8%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 15 g | 60 min | 15.5 % |
| Boil | Mosaic | 15 g | 30 min | 10 % |
| Boil | Centennial | 15 g | 15 min | 10.5 % |
| Boil | Mosaic | 15 g | 5 min | 10 % |
| Boil | Centennial | 15 g | 5 min | 10.5 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|------|--------|---------|--------|
| Fining | mech | 5 g | Boil | 15 min |