

APA

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **29**
- SRM **3.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **44 liter(s)**
- Trub loss **5 %**
- Size with trub loss **46.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **55.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **26.4 liter(s)**
- Total mash volume **35.2 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**
- Temp **100 C**, Time **60 min**

Mash step by step

- Heat up **26.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Keep mash **60 min** at **100C**
- Sparge using **38.1 liter(s)** of **76C** water or to achieve **55.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|----------------|--------|-----|
| Grain | Briess - Pilsen Malt | 6.4 kg (72.7%) | 80.5 % | 2 |
| Grain | Briess - 2 Row Carapils Malt | 0.4 kg (4.5%) | 75 % | 3 |
| Grain | Briess - Wheat Malt, White | 1 kg (11.4%) | 85 % | 5 |
| Grain | Caramel/Crystal Malt - 20L | 0.5 kg (5.7%) | 75 % | 39 |
| Grain | Briess - 2 Row Carapils Malt | 0.5 kg (5.7%) | 75 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Chinook | 30 g | 60 min | 13 % |
| Boil | Cascade | 40 g | 10 min | 6 % |
| Whirlpool | Cascade | 30 g | 20 min | 6 % |
| Dry Hop | Cascade | 30 g | 4 day(s) | 6 % |

30 lemon drop, 30 amarillo kveik
40 Iremon drop 30 centennial us 05

| | | | | |
|----------------|--------|------|----------|------|
| Dry Hop | Mosaic | 30 g | 4 day(s) | 10 % |
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Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------|------|--------|--------|------------|
| FM53 Voss kveik | Ale | Liquid | 100 ml | FM |