

Hoppy Amarillo / Cascade APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **44**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **17.5 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **31.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **15 min** at **78C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 6 kg (90.9%) | 79 % | 5 |
| Grain | Oats, Flaked | 0.3 kg (4.5%) | 80 % | 2 |
| Grain | Wheat, Flaked | 0.3 kg (4.5%) | 77 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| First Wort | Amarillo | 30 g | 70 min | 9.5 % |
| Aroma (end of boil) | Amarillo | 24 g | 15 min | 9.5 % |
| Aroma (end of boil) | Mosaic | 34 g | 5 min | 10 % |
| Dry Hop | Galaxy | 60 g | 5 day(s) | 15 % |
| Dry Hop | Cascade | 100 g | 5 day(s) | 6 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|---------|--------|
| Fining | Irish Moss | 5 g | Boil | 10 min |