

IPA #3

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **99**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|---------------|-------|-----|
| Grain | Malteurop Pale Ale | 5.5 kg (100%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.5 % |
| Boil | Columbus/Tomahawk/Zeus | 30 g | 30 min | 15.5 % |
| Boil | Mosaic | 20 g | 15 min | 10 % |
| Boil | Equinox | 20 g | 15 min | 13.1 % |
| Aroma (end of boil) | Simcoe | 20 g | 15 min | 13.2 % |
| Aroma (end of boil) | Amarillo | 20 g | 15 min | 9.5 % |
| Dry Hop | Columbus/Tomahawk/Zeus | 30 g | 7 day(s) | 15.5 % |
| Dry Hop | Simcoe | 30 g | 7 day(s) | 13.2 % |
| Dry Hop | Amarillo | 30 g | 7 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 10 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|-------------|----------------|-----|------|--------|
| Water Agent | gips | 4 g | Boil | 60 min |
| Water Agent | chlorek wapnia | 4 g | Boil | 60 min |