

Enigma / Cascade IPA

- Gravity **15 BLG**
- ABV ---
- IBU **78**
- SRM **5.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (83.3%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 1 kg (16.7%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 25 g | 60 min | 15.5 % |
| Boil | Enigma (AUS) | 20 g | 15 min | 17.2 % |
| Boil | Cascade | 10 g | 15 min | 6 % |
| Boil | Enigma (AUS) | 15 g | 10 min | 17.2 % |
| Boil | Cascade | 15 g | 10 min | 6 % |
| Boil | Enigma (AUS) | 15 g | 5 min | 17.2 % |
| Boil | Cascade | 15 g | 5 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11 g | Safale |