

Nagły atak chmielu

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **28**
- SRM **7.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.85 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **13.5 liter(s)**

Steps

- Temp **70 C**, Time **30 min**

Mash step by step

- Heat up **10 liter(s)** of strike water to **78.8C**
- Add grains
- Keep mash **30 min** at **70C**
- Sparge using **6.2 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.9 kg (82.9%) | 80 % | 5 |
| Grain | Biscuit Malt | 0.3 kg (8.6%) | 79 % | 45 |
| Grain | Munich Malt | 0.3 kg (8.6%) | 80 % | 18 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Boil | Zythos | 10 g | 60 min | 9.2 % |
| Aroma (end of boil) | Zythos | 5 g | 10 min | 9.2 % |
| Aroma (end of boil) | Enigma (AUS) | 5 g | 10 min | 17 % |
| Whirlpool | Falconer's Flight | 10 g | 0 min | 10.3 % |
| Whirlpool | Enigma (AUS) | 5 g | 0 min | 17 % |
| Whirlpool | Zythos | 10 g | 0 min | 9.2 % |
| Dry Hop | Falconer's Flight | 10 g | 3 day(s) | 10.3 % |
| Dry Hop | Zythos | 20 g | 3 day(s) | 9.2 % |
| Dry Hop | Enigma (AUS) | 10 g | 3 day(s) | 17 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 6 g | Fermentis |