

Rathar

- Gravity **15.7 BLG**
- ABV ---
- IBU **25**
- SRM **6.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **3 %**
- Size with trub loss **33 liter(s)**
- Boil time **70 min**
- Evaporation rate **6 %/h**
- Boil size **36.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **33.9 liter(s)**
- Total mash volume **43.6 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **33.9 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **36.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Castle Pale Ale | 6 kg (61.9%) | 80 % | 8 |
| Grain | Płatki pszeniczne | 1.2 kg (12.4%) | 75 % | 3 |
| Grain | Płatki owsiane | 1 kg (10.3%) | 75 % | 3 |
| Grain | Płatki jęczmienne | 0.8 kg (8.2%) | 75 % | 3 |
| Grain | Abbey (Castle) | 0.7 kg (7.2%) | 80 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Mash | Cascade PL | 50 g | 40 min | 4.4 % |
| Boil | lunga | 15 g | 60 min | 12.9 % |
| Aroma (end of boil) | Simcoe | 25 g | 5 min | 13 % |
| Aroma (end of boil) | Citra | 25 g | 5 min | 13.3 % |
| Aroma (end of boil) | El Dorado | 25 g | 5 min | 12.4 % |
| Whirlpool | Simcoe | 25 g | 0 min | 13 % |
| Whirlpool | Citra | 25 g | 0 min | 13.3 % |
| Whirlpool | El Dorado | 25 g | 0 min | 12.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|-------------|-------------|---------------|-------------------|
| Wyeast - Danny's Favorite | Ale | Slant | 150 ml | Wyeast |