

Brut IPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **37**
- SRM **2.9**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **27 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 **62 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------|--------------|--------|-----|
| Grain | Heidelberg | 3.6 kg (60%) | 80.5 % | 2 |
| Grain | Rice, Flaked | 2.4 kg (40%) | 70 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Aroma (end of boil) | Simcoe | 30 g | 0 min | 11.4 % |
| Aroma (end of boil) | Mosaic | 30 g | 0 min | 10 % |
| Aroma (end of boil) | Citra | 30 g | 0 min | 12 % |
| Whirlpool | Simcoe | 35 g | 20 min | 13.2 % |
| Whirlpool | Mosaic | 35 g | 20 min | 10 % |
| Whirlpool | Citra | 35 g | 20 min | 12 % |
| Dry Hop | Simcoe | 35 g | 3 day(s) | 13.2 % |
| Dry Hop | Mosaic | 35 g | 3 day(s) | 10 % |
| Dry Hop | Citra | 35 g | 3 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|--------|---------|------------------|
| FM54 | Ale | Liquid | 1200 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------------|--------|---------|-----------|
| Other | Łuska ryżowa | 300 g | Mash | 60 min |
| Water Agent | Lactic Acid | 10 g | Mash | 60 min |
| Water Agent | CaCl ₂ | 5 g | Mash | 60 min |
| Water Agent | NaCl | 2 g | Mash | 60 min |
| Fining | Whirlfloc-T | 2.5 g | Boil | 10 min |
| Other | Glukoamylaza | 2.5 g | Primary | 14 day(s) |