

Imperator

- Gravity **20.9 BLG**
- ABV ---
- IBU **112**
- SRM **9**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **3 %**
- Size with trub loss **11.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **20 %/h**
- Boil size **15.3 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

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

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **15.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pale Ale (Malteurop) | 2.8 kg (60.9%) | 81 % | 7 |
| Grain | Słód Owsiany | 1.8 kg (39.1%) | 80 % | 7 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Equinox | 30 g | 60 min | 13.4 % |
| Boil | Equinox | 25 g | 15 min | 13.4 % |
| Boil | Chinook | 25 g | 15 min | 12.3 % |
| Whirlpool | Equinox | 25 g | 0 min | 13.4 % |
| Whirlpool | Chinook | 25 g | 0 min | 12.3 % |
| Dry Hop | Equinox | 60 g | 3 day(s) | 13.4 % |
| Dry Hop | Chinnok | 60 g | 5 day(s) | 12.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------|------|-------|--------|---------------|
| Funktown Pale Ale | Ale | Slant | 150 ml | The Yeast Bay |