

Double IPA

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **95**
- SRM **11.8**
- Style **Imperial 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 **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.3 liter(s)**
- Total mash volume **36.4 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **27.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **7.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------|----------------|-------|-----|
| Grain | Pilzneński | 6 kg (65.9%) | 81 % | 4 |
| Grain | Pszeniczny | 2.5 kg (27.5%) | 85 % | 4 |
| Grain | Żytni | 0.5 kg (5.5%) | 85 % | 8 |
| Grain | Jęczmień palony | 0.1 kg (1.1%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil | lunga | 50 g | 45 min | 11 % |
| Whirlpool | Galaxy | 25 g | 15 min | 15 % |
| Dry Hop | Galaxy | 25 g | 2 day(s) | 15 % |
| Aroma (end of boil) | Magnum | 30 g | 20 min | 13.5 % |
| Boil | Magnum | 20 g | 45 min | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 11 g | Mangrove Jack's |

Extras

| Type | Name | Amount | Use for | Time |
|------|-----------------|--------|-----------|----------|
| Herb | trawa cytrynowa | 20 g | Secondary | 2 day(s) |