

IPA

- Gravity **16.3 BLG**
- ABV ---
- IBU **91**
- SRM **11.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **120 min**
- Evaporation rate **5 %/h**
- Boil size **25.3 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 **65 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **75 C**, Time **1 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **75C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (83.3%) | 85 % | 7 |
| Grain | Monachijski | 0.7 kg (11.7%) | 80 % | 16 |
| Grain | Caramel/Crystal Malt - 20L | 0.3 kg (5%) | 75 % | 120 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil | Equinox | 30 g | 110 min | 13.59 % |
| Boil | Cascade | 30 g | 80 min | 6.8 % |
| Boil | Cascade | 30 g | 50 min | 6.8 % |
| Boil | Willamette | 20 g | 20 min | 4.7 % |
| Whirlpool | Willamette | 20 g | 20 min | 4.7 % |
| Dry Hop | Equinox | 20 g | 7 day(s) | 13.59 % |
| Dry Hop | Cascade | 30 g | 7 day(s) | 6.8 % |
| Dry Hop | Willamette | 20 g | 7 day(s) | 4.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|-------------|-------------|---------------|-------------------|
| Safale S-05 | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|---------------|----------------|-------------|
| Fining | Mech irlandzki | 5 g | Boil | 15 min |