

Fruit IPA

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **51**
- SRM **5.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **12 %/h**
- Boil size **28.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **26.5 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **19.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------|-----------------|-------|-----|
| Grain | Viking Pilsner eko malt | 2.35 kg (35.5%) | 79 % | 4 |
| Grain | Viking Karmel 30 | 0.42 kg (6.3%) | 75 % | 30 |
| Grain | Viking Pilsner malt | 3 kg (45.3%) | 82 % | 4 |
| Grain | Viking Monach I | 0.45 kg (6.8%) | 78 % | 18 |
| Grain | Płatki owsiane | 0.4 kg (6%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 25 g | 60 min | 16.8 % |
| Boil | Galaxy | 30 g | 10 min | 13.3 % |
| Whirlpool | Centennial | 25 g | 0 min | 9.7 % |
| Dry Hop | Mosaic | 8 g | 3 day(s) | 10 % |
| Dry Hop | Mosaic | 30 g | 3 day(s) | 12.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 400 ml | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------|---------------|--------|-----------|-----------|
| Other | Mango pulpa | 0.85 g | Secondary | 10 day(s) |
| Other | Ananas świeży | 1.2 g | Secondary | 10 day(s) |