

Micro PA - 5

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **42**
- SRM **4.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **32.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **55 C**, Time **1 min**
- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **1 min** at **55C**
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **32.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------|----------------|-------|-----|
| Grain | Pale Ale Best | 4.5 kg (81.8%) | 80 % | 6 |
| Grain | Wheat, Flaked | 0.6 kg (10.9%) | 77 % | 4 |
| Grain | Carahell Best | 0.2 kg (3.6%) | 75 % | 30 |
| Grain | Carapils Best | 0.2 kg (3.6%) | 75 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|-----------|--------|--------|------------|
| First Wort | Simcoe | 1 g | 60 min | 13.3 % |
| Whirlpool | Citra | 30 g | 15 min | 13.9 % |
| Whirlpool | Mosaic | 30 g | 15 min | 11.6 % |
| Whirlpool | Simcoe | 30 g | 15 min | 13.3 % |
| Whirlpool | Amarillo | 30 g | 15 min | 7.4 % |
| Whirlpool | El Dorado | 30 g | 15 min | 14 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------------|------|--------|--------|-------------|
| Wyeast - 1728 Scottish Ale | Ale | Liquid | 100 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------|--------|---------|--------|
| Flavor | Laktoza | 200 g | Boil | 10 min |