

Micro PA - 2

- Gravity **10 BLG**
- ABV **4 %**
- IBU **29**
- SRM **3.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **24.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

Steps

- Temp **55 C**, Time **1 min**
- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **1 min** at **55C**
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------|----------------|-------|-----|
| Grain | Pale Ale Best | 2.5 kg (71.4%) | 80 % | 6 |
| Grain | Weizenmalz Best | 0.3 kg (8.6%) | 82 % | 4 |
| Grain | Carapils Best | 0.2 kg (5.7%) | 75 % | 5 |
| Grain | Oats, Flaked | 0.5 kg (14.3%) | 80 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | Perle | 1 g | 60 min | 9.7 % |
| Aroma (end of boil) | Amarillo | 20 g | 15 min | 7.4 % |
| Whirlpool | Amarillo | 50 g | 30 min | 7.4 % |

Yeasts

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