

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