

micro IPA Cascade PL

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **34**
- SRM **4.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **28.6 liter(s)**

Steps

- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **25 min**

Mash step by step

- Heat up **23.4 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **45 min** at **68C**
- Keep mash **25 min** at **72C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------|---------------|-------|-----|
| Grain | Castle Pale Ale | 4 kg (76.9%) | 80 % | 8 |
| Grain | Pszeniczny | 0.2 kg (3.8%) | 85 % | 4 |
| Grain | Rice, Flaked | 1 kg (19.2%) | 70 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Cascade PL | 25 g | 30 min | 5.2 % |
| Aroma (end of boil) | Cascade PL | 50 g | 15 min | 5.2 % |
| Aroma (end of boil) | Cascade PL | 100 g | 5 min | 5.2 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | Whirlfloc | 2.5 g | Boil | 10 min |