

IPA_munich

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **34**
- SRM **10.6**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **30.6 liter(s)**

Mash information

- Mash efficiency **96 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **60 min** at **68C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Briess - Munich Malt 10L | 5 kg (90.9%) | 77 % | 20 |
| Grain | Weyermann - Carawheat | 0.5 kg (9.1%) | 77 % | 97 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Sabro | 10 g | 30 min | 13.3 % |
| Boil | citra | 10 g | 30 min | 13.4 % |
| Boil | Mandarina Bavaria | 20 g | 15 min | 7.5 % |
| Boil | Cascade | 20 g | 15 min | 8.1 % |
| Boil | Mandarina Bavaria | 30 g | 5 min | 7.5 % |