

gingers

- Gravity **10 BLG**
- ABV **4 %**
- IBU **24**
- SRM **3.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.2 liter(s)**
- Total mash volume **9.6 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **7.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------------|---------------|--------|-----|
| Grain | Castle Malting - Pilszeński 6-rzędowy | 2 kg (83.3%) | 80 % | 5 |
| Grain | Bestmaltz Acid Malt | 0.2 kg (8.3%) | 58.7 % | 6 |
| Grain | Rice, Flaked | 0.2 kg (8.3%) | 70 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------|--------|--------|------------|
| Boil | Zula | 15 g | 60 min | 8.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Spice | imbir | 60 g | Boil | 5 min |
| Flavor | laktoza | 200 g | Boil | 15 min |
| Fining | mech irlandzki | 5 g | Boil | 15 min |