

Pale Ale

- Gravity **8.5 BLG**
- ABV **3.3 %**
- IBU **25**
- SRM **3.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | Simpsons - Maris Otter | 3 kg (85.7%) | 80.3 % | 5.3 |
| Grain | Strzegom Pilzniejszy | 0.5 kg (14.3%) | 80 % | 4.5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Fuggles | 15 g | 60 min | 4.5 % |
| Boil | Target | 15 g | 60 min | 9 % |
| Aroma (end of boil) | Citra | 25 g | 0 min | 12 % |
| Aroma (end of boil) | Galaxy | 25 g | 0 min | 15 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------|--------|-----------|----------|
| Flavor | mango | 1 g | Secondary | 7 day(s) |