

apa

- Gravity **14.7 BLG**
- ABV ---
- IBU **62**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------|---------------|-------|-----|
| Grain | Pilzneński | 5 kg (94.3%) | 81 % | 2 |
| Grain | Carahell | 0.3 kg (5.7%) | 77 % | 26 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Mosaic | 20 g | 60 min | 12.2 % |
| Boil | Amarillo | 20 g | 30 min | 8.8 % |
| Boil | Mosaic | 10 g | 15 min | 12.2 % |
| Boil | Amarillo | 20 g | 15 min | 8.8 % |
| Boil | Amarillo | 20 g | 5 min | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------|------------|--------|-----------|----------|
| Other | mus z kiwi | 1500 g | Secondary | 7 day(s) |