

APA

- Gravity **12.1 BLG**
- ABV ---
- IBU **66**
- SRM **5.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **12.2 liter(s)**
- Total mash volume **14.9 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **12.2 liter(s)** of strike water to **70C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **4.8 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|----------------|-------|-----|
| Grain | Weyermann Pilsneński Premium | 2.2 kg (81.5%) | 80 % | 2 |
| Grain | Strzegom pszeniczny | 0.15 kg (5.6%) | 81 % | 6 |
| Grain | Fawcett Golden Promise Pale Ale | 0.15 kg (5.6%) | 80 % | 7 |
| Grain | Fawcett Pale Caramalt | 0.1 kg (3.7%) | 70 % | 15 |
| Grain | BESTMALZ - Best Melanoidin | 0.1 kg (3.7%) | 75 % | 70 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|----------|------------|
| Boil | Citra | 10 g | 45 min | 12.4 % |
| Boil | Citra | 20 g | 15 min | 12.4 % |
| Boil | Citra | 30 g | 5 min | 12.4 % |
| Dry Hop | Belma | 50 g | 7 day(s) | 12.8 % |
| Dry Hop | Citra | 50 g | 7 day(s) | 12.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------|-----|-------|--------|-----------|
| Safale US-05 | Ale | Slant | 200 ml | Fermentis |
|--------------|-----|-------|--------|-----------|