

APA

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **48**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 4 kg (88.9%) | 85 % | 7 |
| Grain | Platki owsiane | 0.5 kg (11.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-------------|--------|----------|------------|
| Boil | Citra | 25 g | 20 min | 12 % |
| Boil | Chinook | 25 g | 5 min | 13 % |
| Boil | Citra | 25 g | 5 min | 12 % |
| Boil | Sorachi Ace | 25 g | 5 min | 10 % |
| Whirlpool | Chinook | 25 g | 5 min | 13 % |
| Whirlpool | Citra | 25 g | 5 min | 12 % |
| Whirlpool | Sorachi Ace | 25 g | 5 min | 10 % |
| Dry Hop | Citra | 100 g | 4 day(s) | 12 % |
| Dry Hop | Sorachi Ace | 50 g | 4 day(s) | 10 % |

Yeasts

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

| | | | | |
|----------------------|-----|--------|--------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 100 ml | Fermentum Mobile |
|----------------------|-----|--------|--------|------------------|