

APA

- Gravity **14.5 BLG**
- ABV ---
- IBU **59**
- SRM **5.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **65 C**, Time **70 min**

Mash step by step

- Heat up **23.2 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **70 min** at **65C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.5 kg (77.6%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (8.6%) | 79 % | 16 |
| Grain | Strzegom Pszeniczny | 0.5 kg (8.6%) | 81 % | 6 |
| Grain | Weyermann - Carapils | 0.3 kg (5.2%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Chinook | 20 g | 60 min | 13 % |
| Boil | Chinook | 15 g | 15 min | 13 % |
| Boil | Ahtanum | 15 g | 15 min | 5 % |
| Aroma (end of boil) | Centennial | 30 g | 5 min | 10.5 % |
| Aroma (end of boil) | Mosaic | 30 g | 5 min | 10 % |
| Aroma (end of boil) | Ahtanum | 20 g | 1 min | 5 % |
| Aroma (end of boil) | Chinook | 15 g | 10 min | 13 % |
| Aroma (end of boil) | Ahtanum | 15 g | 10 min | 5 % |
| Dry Hop | Citra | 70 g | 0 day(s) | 12 % |
| Whirlpool | citra | 30 g | 0 min | 12 % |

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------------|-------------|---------------|-------------------|
| FM52 Amerykański Sen | Ale | Slant | 300 ml | Fermentum Mobile |