

## Apa 2.0

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- Gravity **11.9 BLG**
- ABV ---
- IBU **38**
- SRM **8.6**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**

### Mash step by step

- Heat up **15.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount       | Yield | EBC |
|-------|-----------------------------|--------------|-------|-----|
| Grain | Strzegom Pale Ale           | 4 kg (78.4%) | 79 %  | 6   |
| Grain | Strzegom Monachijski typ II | 1 kg (19.6%) | 79 %  | 22  |
| Grain | Strzegom Karmel 150         | 0.1 kg (2%)  | 75 %  | 150 |

### Hops

| Use for             | Name       | Amount | Time     | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil                | Chinook    | 20 g   | 60 min   | 13 %       |
| Boil                | Chinook    | 15 g   | 15 min   | 13 %       |
| Aroma (end of boil) | Centennial | 30 g   | 0 min    | 10.5 %     |
| Dry Hop             | Centennial | 10 g   | 7 day(s) | 10.5 %     |
| Dry Hop             | Chinook    | 5 g    | 7 day(s) | 13 %       |

### Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale  | Dry  | 11 g   | ---        |