

Apa 2.0

- 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 | --- |