

Pierwsze APA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **50**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **7.1 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **13.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|-----------------|-------|-----|
| Grain | Strzegom Pale Ale | 1.75 kg (74.5%) | 79 % | 6 |
| Grain | Strzegom Wiedeński | 0.5 kg (21.3%) | 79 % | 10 |
| Grain | Strzegom Karmel 30 | 0.1 kg (4.3%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Warrior | 12.5 g | 60 min | 15.5 % |
| Aroma (end of boil) | Cascade | 7.5 g | 15 min | 6 % |
| Aroma (end of boil) | Cascade | 10 g | 5 min | 6 % |
| Aroma (end of boil) | Cascade | 7.5 g | 0 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 6 g | Fermentis |