

Apka

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **50**
- SRM **8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 2 kg (30.8%) | 79 % | 6 |
| Grain | Strzegom Wiedeński | 2 kg (30.8%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (7.7%) | 79 % | 15 |
| Grain | Caramunich® typ I | 0.5 kg (7.7%) | 73 % | 80 |
| Grain | Bestmalz Carmel Pils | 1.5 kg (23.1%) | 75 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|---------|--------|----------|------------|
| First Wort | Cascade | 50 g | 60 min | 7.1 % |
| Boil | Simcoe | 30 g | 10 min | 12.1 % |
| Dry Hop | Cascade | 50 g | 7 day(s) | 7.1 % |
| Dry Hop | Simcoe | 30 g | 7 day(s) | 12.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | --- |