

APA 3#

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **23**
- SRM **5.3**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **24.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 3.5 kg (50%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 1.2 kg (17.1%) | 79 % | 16 |
| Grain | Strzegom Wiedeński | 1.5 kg (21.4%) | 79 % | 10 |
| Grain | Pszenica niesłodowana | 0.8 kg (11.4%) | 75 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Chinook | 20 g | 60 min | 12 % |
| Aroma (end of boil) | Chinook | 10 g | 5 min | 12 % |
| Aroma (end of boil) | Ahtanum | 10 g | 5 min | 4 % |
| Whirlpool | Ahtanum | 20 g | 1 min | 4 % |
| Whirlpool | Columbus/Tomahawk/Zeus | 20 g | 1 min | 15 % |
| Whirlpool | Equinox | 20 g | 1 min | 11.5 % |
| Dry Hop | Citra | 50 g | 5 day(s) | 12 % |
| Dry Hop | Enigma (AUS) | 40 g | 5 day(s) | 17.2 % |
| Dry Hop | Equinox | 10 g | 5 day(s) | 11.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 150 ml | Fermentis |