

## 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