

Apa - Chinook, Simcoe i Citra

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **50**
- SRM **6.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **67.5 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **70 min** at **67.5C**
- Keep mash **5 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	1.8 kg (31%)	80 %	6.5
Grain	Strzegom Monachijski typ II	0.9 kg (15.5%)	79 %	20
Grain	Carahell	0.5 kg (8.6%)	77 %	26
Grain	Pszeniczny	0.77 kg (13.3%)	85 %	4
Grain	Pilzneński	0.83 kg (14.3%)	81 %	4
Grain	Monachijski	1 kg (17.2%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	60 min	12.8 %
Boil	Simcoe	10 g	35 min	13.2 %
Boil	Chinook	5 g	20 min	12.8 %
Boil	Simcoe	5 g	20 min	13.2 %
Boil	Chinook	15 g	10 min	12.8 %
Boil	Citra	15 g	10 min	12.3 %
Aroma (end of boil)	Simcoe	10 g	15 min	13.2 %
Dry Hop	Citra	20 g	7 day(s)	12.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Safale