APA

- Gravity **12.4 BLG**
- ABV **---**
- IBU **62**
- SRM **11.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **5 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg *(36.4%)*	79 %	6
Grain	Strzegom Pszeniczny	1 kg *(18.2%)*	81 %	6
Grain	Strzegom Karmel 150	0.5 kg *(9.1%)*	75 %	150
Grain	Strzegom Pilzneński	2 kg *(36.4%)*	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	12.07 %
Boil	Chinook	20 g	15 min	12.07 %
Boil	Cascade	10 g	15 min	6.8 %
Boil	Pacific Jade	10 g	15 min	12.4 %
Boil	Cascade	10 g	5 min	6.8 %
Boil	Pacific Jade	10 g	5 min	12.4 %
Boil	Ahtanum	10 g	5 min	3.4 %
Boil	Cascade	10 g	0 min	6.8 %
Boil	Ahtanum	20 g	0 min	3.4 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Boil	Pacific Jade	10 g	0 min	12.4 %
Dry Hop	Pacific Jade	20 g	5 day(s)	12.4 %
Dry Hop	Ahtanum	20 g	5 day(s)	3.4 %
Dry Hop	Cascade	20 g	5 day(s)	6.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis