APA

- Gravity **14.5 BLG**
- ABV **---**
- IBU **59**
- SRM **5.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **23.2 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **65 C**, Time **70 min**

Mash step by step

- Heat up **23.2 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **70 min** at **65C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg *(77.6%)*	80 %	5
Grain	Strzegom Monachijski typ I	0.5 kg *(8.6%)*	79 %	16
Grain	Strzegom Pszeniczny	0.5 kg *(8.6%)*	81 %	6
Grain	Weyermann - Carapils	0.3 kg *(5.2%)*	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	13 %
Boil	Chinook	15 g	15 min	13 %
Boil	Ahtanum	15 g	15 min	5 %
Aroma (end of boil)	Centennial	30 g	5 min	10.5 %
Aroma (end of boil)	Mosaic	30 g	5 min	10 %
Aroma (end of boil)	Ahtanum	20 g	1 min	5 %
Aroma (end of boil)	Chinook	15 g	10 min	13 %
Aroma (end of boil)	Ahtanum	15 g	10 min	5 %
Dry Hop	Citra	70 g	0 day(s)	12 %
Whirlpool	citra	30 g	0 min	12 %

Yeasts

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

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	300 ml	Fermentum Mobile