Light APA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **8 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **5.6 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **33 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **28 liter(s)** of strike water to **71.2C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg *(80%)*	80 %	5
Grain	Strzegom Monachijski typ I	1 kg *(20%)*	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	10 g	60 min	6 %
Boil	Mandarina Bavaria	10 g	30 min	10 %
Aroma (end of boil)	Cascade	10 g	15 min	6 %
Aroma (end of boil)	Mandarina Bavaria	15 g	15 min	10 %
Aroma (end of boil)	Citra	20 g	15 min	12 %
Whirlpool	Mandarina Bavaria	70 g	0 min	10 %
Whirlpool	Citra	30 g	0 min	12 %
Whirlpool	Cascade	10 g	0 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	---

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