

APA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **35**
- SRM **6.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (63.8%)	80 %	5
Grain	Monachijski	0.5 kg (10.6%)	80 %	16
Grain	Pszeniczny	1 kg (21.3%)	85 %	4
Grain	Strzegom Karmel 150	0.2 kg (4.3%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	6 %
Boil	Cascade	20 g	10 min	6 %
Boil	Lublin (Lubelski)	20 g	60 min	4 %
Boil	Saaz (Czech Republic)	15 g	60 min	4.5 %