

SM APA

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **53**
- SRM **10.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.5 liter(s)**
- Total mash volume **10 liter(s)**

Steps

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

Mash step by step

- Heat up **7.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.3 kg (92%)	70 %	---
Grain	Strzegom Karmel 300	0.2 kg (8%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	60 min	13.3 %
Aroma (end of boil)	Cascade	10 g	10 min	7.6 %
Dry Hop	Cascade	20 g	---	7.6 %

Yeasts

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