

APA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **26**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12.5 %/h**
- Boil size **27.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.05 liter(s) / kg**
- Mash size **23 liter(s)**
- Total mash volume **28.7 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **23 liter(s)** of strike water to **69.4C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.9 kg (51%)	80 %	5
Grain	Strzegom Pszeniczny	2 kg (35.1%)	81 %	6
Grain	Płatki owsiane	0.6 kg (10.5%)	85 %	3
Grain	Cookie Vikng Malt	0.19 kg (3.3%)	72 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	50 min	10.5 %
Whirlpool	Amarillo	20 g	0 min	10.5 %
Whirlpool	Cascade	20 g	0 min	7.2 %
Dry Hop	Amarillo	50 g	3 day(s)	10.5 %
Dry Hop	Cascade	50 g	3 day(s)	7.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
LallBrew New England	Ale	Dry	11 g	Lallemand