APA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **31**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.8 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **75 C**, Time **15 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **75C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **30.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg *(77.4%)*	80 %	5
Grain	Viking Wheat Malt	1 kg *(15.5%)*	83 %	5
Grain	Weyermann - Caraamber	0.16 kg *(2.5%)*	75 %	65
Grain	Płatki owsiane	0.3 kg *(4.6%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	25 g	15 min	10.5 %
Boil	Amarillo	30 g	15 min	9.5 %
Boil	Willamette	25 g	15 min	5 %
Dry Hop	Mosaic	100 g	4 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time

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

Fining	Mech Irlandzki	5 g	Boil	10 min
Water Agent	Chlorek Wapnia	5 g	Mash	75 min
Water Agent	Gips Piwowarski	5 g	Mash	75 min