#163 ctrl+K

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **29**
- SRM **4.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **16.3 liter(s)**
- Trub loss **7 %**
- Size with trub loss **17.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.9 liter(s)**
- Total mash volume **17.8 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **13.9 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **77C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt pale ale	2.5 kg *(63.1%)*	80 %	5
Grain	Viking Malt pszeniczny	1 kg *(25.3%)*	81 %	5
Grain	Płatki owsiane	0.46 kg *(11.6%)*	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Nectaron NZ 2022	50 g	12 min	9.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Slant	30 ml	Lallemand