

## #162 ctrl+j

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **30**
- SRM **4.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **14.95 liter(s)**
- Trub loss **7 %**
- Size with trub loss **16.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **18.4 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.3 liter(s)**
- Total mash volume **17.1 liter(s)**

### Steps

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

### Mash step by step

- Heat up **13.3 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **77C**
- Sparge using **8.9 liter(s)** of **76C** water or to achieve **18.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt pale ale	2.5 kg (65.8%)	80 %	5
Grain	Viking Malt pszeniczny	1 kg (26.3%)	81 %	5
Grain	Płatki owsiane	0.3 kg (7.9%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula PL 2021	15 g	60 min	13.3 %
Aroma (end of boil)	Zula PL 2021	15 g	1 min	13.3 %
Dry Hop	Zula PL 2021	50 g	7 day(s)	8.2 %

### Yeasts

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