

## #156 Posobotnie :)

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **17**
- SRM **3.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **24.6 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

### Steps

- Temp **47 C**, Time **30 min**
- Temp **67 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **14.7 liter(s)** of strike water to **51.5C**
- Add grains
- Keep mash **30 min** at **47C**
- Keep mash **30 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt pilznieński	3.65 kg (74.5%)	80 %	4
Grain	Steinbach pszeniczny	1.25 kg (25.5%)	81 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade US 2021	10 g	60 min	7.9 %
Boil	Cascade US 2021	15 g	30 min	7.9 %
Aroma (end of boil)	Cascade US 2021	25 g	1 min	7.9 %
Dry Hop	Cascade US 2021	50 g	7 day(s)	7.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - LalBrew Verdant IPA	Ale	Slant	40 ml	Lallemand