

## IPA v16 #127

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- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **61**
- SRM **6.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **17.4 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.6 liter(s)**
- Boil time **80 min**
- Evaporation rate **22 %/h**
- Boil size **24.6 liter(s)**

### Mash information

- Mash efficiency **85.4 %**
- Liquor-to-grist ratio **3.27 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.6 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **7 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **73.1C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **7 min** at **77C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **24.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	pale ale - viking	2.9 kg (63%)	80 %	5.5
Grain	pszeniczny - bestmalz	0.25 kg (5.4%)	82 %	5
Grain	wiedeński - viking	0.7 kg (15.2%)	79 %	8.6
Grain	monachijski I - viking	0.7 kg (15.2%)	79 %	16
Grain	Chateau - cara gold	0.05 kg (1.1%)	78 %	120

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	11.5 %
Boil	Columbus	30 g	15 min	15.7 %
Aroma (end of boil)	Sabro	20 g	5 min	14.8 %
Aroma (end of boil)	Strata	50 g	1 min	15.5 %
Aroma (end of boil)	Galaxy	30 g	1 min	17.4 %
Dry Hop	Sabro	30 g	2 day(s)	14.8 %
Dry Hop	Strata	50 g	2 day(s)	14.5 %
Dry Hop	Galaxy	20 g	2 day(s)	17.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	120 ml	Fermentum Mobile
49-dniowa gęstwa				

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	3 g	Mash	---
Water Agent	kwask mlekowy 80% [ml]	3.85 g	Mash	---
Water Agent	chlorek wapnia [ml]	0 g	Mash	---
Water Agent	epsom	0.5 g	Mash	---
Water Agent	mech irlandzki	3 g	Boil	15 min
Water Agent	kwask askorbinowy	3.4 g	Bottling	---