

## American IPA (Galaxy i CTZ) 10-07-2019 r.

- Gravity **16.1 BLG**
- ABV ---
- IBU **58**
- SRM **4.4**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

### Steps

- Temp **50 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **79 C**, Time **10 min**

### Mash step by step

- Heat up **24 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **79C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	5 kg (62.5%)	80 %	4
Grain	Słód pszeniczny Bestmalz	2 kg (25%)	82 %	5
Grain	Płatki owsiane	1 kg (12.5%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	40 min	15.5 %
Whirlpool	Galaxy	50 g	5 min	15 %
Dry Hop	Galaxy	100 g	3 day(s)	15 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	Fermentis