

## tIPA time

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- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **55**
- SRM **6.4**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **19.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **19.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1 kg (22.2%)	80 %	5
Grain	Maris Otter Pale Ale	1 kg (22.2%)	80 %	7
Grain	Clear Choice Pale Ale	1 kg (22.2%)	80 %	7
Grain	Strzegom Monachijski typ I	1 kg (22.2%)	79 %	16
Grain	Strzegom Wiedeński	0.5 kg (11.1%)	79 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	10 g	60 min	8.5 %
Boil	Citra	10 g	40 min	14.2 %
Boil	Cascade	10 g	30 min	6 %
Boil	Mandarina Bavaria	10 g	25 min	8.5 %
Boil	Cascade	10 g	15 min	6 %
Boil	Citra	10 g	10 min	14.2 %
Boil	Mandarina Bavaria	10 g	5 min	8.5 %
Dry Hop	Citra	30 g	5 day(s)	14.2 %
Dry Hop	Mandarina Bavaria	30 g	5 day(s)	8.5 %

Dry Hop	Cascade	30 g	2 day(s)	6 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	Mangrove Jack's

### Extras

Type	Name	Amount	Use for	Time
Flavor	Earl Grey (50% warki)	30 g	Secondary	2 day(s)