

# HOP RUNNER

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **42**
- SRM **5.6**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **28 liter(s)**
- Total mash volume **35 liter(s)**

## Steps

- Temp **67 C**, Time **75 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **28 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **5.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (54.8%)	81 %	4
Grain	Strzegom Wiedeński	1.25 kg (17.1%)	79 %	10
Grain	Dekstrynowy	0.25 kg (3.4%)	79 %	12
Sugar	Glukoza	0.3 kg (4.1%)	100 %	0
Grain	Briess - Pale Ale Malt	1.5 kg (20.5%)	80 %	7

## Hops

Use for	Name	Amount	Time	Alpha acid
Mash	lunga	30 g	60 min	11 %
Boil	lunga	20 g	60 min	11 %
Aroma (end of boil)	Simcoe	10 g	15 min	13.2 %
Aroma (end of boil)	Chinook	20 g	5 min	13 %
Whirlpool	Cascade	25 g	25 min	6 %
Whirlpool	Citra	25 g	25 min	12 %
Dry Hop	Citra	100 g	5 day(s)	12 %
Dry Hop	Cascade	50 g	5 day(s)	6 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
US-05	Ale	Dry	11.5 g	---