

Enigma single hop

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **74**
- SRM **4.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **22 %/h**
- Boil size **18.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.1 liter(s)**
- Total mash volume **14.8 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **11.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **18.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.3 kg (89.2%)	90 %	5
Grain	Płatki owsiane	0.4 kg (10.8%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	20 g	60 min	18.2 %
Whirlpool	Enigma (AUS)	35 g	15 min	18.2 %
Dry Hop	Enigma (AUS)	40 g	2 day(s)	18.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - American Ale	Ale	Slant	100 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Flavor	Pulpa z Mango alphonso 99.9%	850 g	Secondary	5 day(s)