

## #26 Enigma Pale Ale (na rozruch fiolki)

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **33**
- SRM **4.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **13.2 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **18.6 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **13 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**

### Mash step by step

- Heat up **9.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **18.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.6 kg (80%)	80 %	5
Grain	Pszeniczny	0.4 kg (12.3%)	85 %	4
Grain	Pszeniczny ciemny	0.1 kg (3.1%)	85 %	16
Grain	Weyermann - Carapils	0.15 kg (4.6%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	15 min	15.5 %
Aroma (end of boil)	Enigma (AUS)	15 g	15 min	16.5 %
Aroma (end of boil)	Enigma (AUS)	20 g	3 min	16.5 %
Dry Hop	Enigma (AUS)	15 g	5 day(s)	16.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	50 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	3 g	Boil	20 min

## Notes

- Do 8 litrów dodatek puszek mango, 6 litrów butelkowane normalnie.  
5.4% abv 80% odfermentowania  
Trochę za dużo na zimno  
*Dec 2, 2018, 4:41 PM*