

ENIGMA_

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **117**
- SRM **8.8**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **4 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **25.3 liter(s)**
- Total mash volume **32.5 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **25.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **76C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **27.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (60.8%)	81 %	4
Grain	Płatki jeczienne	0.88 kg (10.7%)	85 %	3
Grain	Briess - Carapils Malt	0.2 kg (2.4%)	74 %	3
Grain	Żytni	1 kg (12.2%)	85 %	8
Grain	Caraaroma	0.15 kg (1.8%)	78 %	400
Sugar	Candi Sugar, Clear	1 kg (12.2%)	78.3 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	70 g	60 min	13.5 %
Boil	Enigma (AUS)	10 g	10 min	17.2 %
Boil	Enigma (AUS)	10 g	5 min	17.2 %
Aroma (end of boil)	Enigma (AUS)	30 g	0 min	17.2 %
Boil	Marynka	50 g	60 min	10 %
Dry Hop	Enigma (AUS)	50 g	3 day(s)	17.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
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US 05	Ale	Slant	200 ml	---
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