

Luna regina stellarum est 1.0

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **27**
- SRM **4.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **9.5 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **17 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **80 C**, Time **1 min**

Mash step by step

- Heat up **10 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **80C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **17 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt - Pale Ale	1.75 kg (61.4%)	80 %	7
Grain	Viking Malt - Słód pszeniczny	0.5 kg (17.5%)	80 %	6
Grain	Płatki owsiane	0.6 kg (21.1%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus -Zeus (2018 - USA)	10 g	60 min	15.1 %
Boil	Galaxy (2020 - AUS) - Hopstand 80-70°C (20 min)	50 g	0 min	16.2 %
Dry Hop	Galaxy (2020 - AUS)	25 g	2 day(s)	16.2 %
Dry Hop	Galaxy (2020 - AUS)	25 g	2 day(s)	16.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	8.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Other	Woda zacieranie (olsztńska Nagórki - 7,60pH)	10000 g	Mash	71 min
Other	Woda wyśładzanie (olsztńska Nagórki - 7,60pH)	10000 g	Mash	71 min
Water Agent	Kwas fosforowy (woda do zacierania)	1.5 g	Mash	71 min
Water Agent	Kwas fosforowy (woda do wyśładzania)	3.5 g	Mash	71 min
Fining	Whirlfloc T	1 g	Boil	5 min