

# Luna regina stellarum est 1.0

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **27**
- SRM **4.4**
- 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 **16.7 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 **9.6 liter(s)** of **76C** water or to achieve **16.7 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)                             | 50 g   | 7 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<br>(olsztńska Nagórki -<br>7,60pH)  | 10000 g | Mash    | 71 min |
| Other       | Woda wysładzanie<br>(olsztńska Nagórki -<br>7,60pH) | 10000 g | Mash    | 71 min |
| Water Agent | Kwas fosforowy<br>(woda do zacierania)              | 1.5 g   | Mash    | 71 min |
| Water Agent | Kwas fosforowy<br>(woda do<br>wysładzania )         | 3.5 g   | Mash    | 71 min |
| Fining      | Whirlfloc T   | 1 g     | Boil    | 5 min  |

## Notes

- Sol rex caeli, Luna regina stellarum est - Słońce jest królem nieba, Księżyc jest królową gwiazd.  
*Jan 13, 2021, 7:32 AM*