

Zagadka Kangura (Enigma Single Hop)

- Gravity **15.6 BLG**
- ABV ---
- IBU **120**
- SRM **6.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **12 %**
- Size with trub loss **26.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **63 C**, Time **45 min**
- Temp **68 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **30.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|-------------|-------|-----|
| Grain | Strzegom Pale Ale | 7 kg (100%) | 79 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|----------|------------|
| Boil | enigma | 50 g | 60 min | 16.5 % |
| Boil | enigma | 20 g | 45 min | 16.5 % |
| Boil | enigma | 20 g | 30 min | 16.5 % |
| Boil | enigma | 20 g | 5 min | 16.5 % |
| Dry Hop | enigma | 40 g | 7 day(s) | 16.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 12 g | Mangrove Jack's |