

Rye'rytas z Alderaan

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **57**
- SRM **6.1**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **3 %**
- Size with trub loss **11.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **18 %/h**
- Boil size **16 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **45 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **4.7 liter(s)** of **76C** water or to achieve **16 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (66.7%) | 80 % | 5 |
| Grain | Pszeniczny | 0.2 kg (4.4%) | 85 % | 4 |
| Grain | Żytni | 1.3 kg (28.9%) | 85 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | lunga | 15 g | 60 min | 11 % |
| Whirlpool | Citra | 35 g | 15 min | 12 % |
| Whirlpool | Amarillo | 35 g | 15 min | 9.5 % |
| Dry Hop | Citra | 30 g | 3 day(s) | 12 % |
| Dry Hop | Amarillo | 30 g | 3 day(s) | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|-------|--------|------------|
| WLP002 - English Ale Yeast | Ale | Slant | 100 ml | White Labs |