

# 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 |