

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