

# rzeźnik

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **45**
- SRM **11**
- Style **Red IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **8 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **65.5 C**, Time **90 min**
- Temp **75.6 C**, Time **20 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **73.1C**
- Add grains
- Keep mash **90 min** at **65.5C**
- Keep mash **20 min** at **75.6C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6.3 kg (98.4%)	80 %	5
Grain	Jęczmień palony	0.1 kg (1.6%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	12 g	60 min	15.5 %
Boil	Citra	10 g	30 min	12 %
Boil	Simcoe	10 g	30 min	13.2 %
Boil	amarillo	10 g	15 min	7.5 %
Boil	Simcoe	10 g	15 min	13.2 %
Dry Hop	Citra	35 g	3 day(s)	12 %
Dry Hop	Simcoe	35 g	3 day(s)	13.2 %
Dry Hop	Amarillo	20 g	3 day(s)	7.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	140 ml	Fermentum Mobile