

# Ciemna Strona

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **68**
- SRM **26.6**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (88%)	80 %	5
Grain	viking słód barwiący	0.25 kg (4%)	68 %	1300
Grain	Viking czekoladowy jasny	0.25 kg (4%)	75 %	300
Grain	viking karmelowy	0.25 kg (4%)	55 %	130

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ekuanot	30 g	60 min	14 %
Boil	Centennial	30 g	15 min	10.5 %
Aroma (end of boil)	Mosaic	50 g	5 min	10 %
Dry Hop	Simcoe	70 g	5 day(s)	13.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	100 ml	Fermentum Mobile