

# Gubernator Bahamów- Tropical Stout

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **43**
- SRM **37.5**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **5 min** at **78C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (55.6%)	85 %	7
Adjunct	Platki owsiane	0.8 kg (11.1%)	85 %	4
Grain	Caramel/Crystal Malt - 120L	1 kg (13.9%)	72 %	236
Grain	Weyermann - Chocolate Wheat	0.4 kg (5.6%)	74 %	788
Grain	Weyermann - Chocolate Rye	0.4 kg (5.6%)	20 %	493
Sugar	Molasses	0.6 kg (8.3%)	78.3 %	158

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	50 g	60 min	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	22 g	Danstar

## Extras

Type	Name	Amount	Use for	Time
Flavor	Ziarna Tonki	25 g	Secondary	7 day(s)
Spice	Kakao	400 g	Boil	10 min

## Notes

- Fermentacja:  
Burzliwa (7 dni w 20 st. C)  
Cicha (14 dni w 20 st. C)

Butelkowanie:  
Syrop cukrowy na refermentacji (110 g cukru w 400 ml wody)

Dojrzewanie piwa:  
3 tygodnie w temperaturze 16-18 st. C.

Na zdrowie  
(Koszt surowców 128 zł)  
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