

# Murica Stout

- Gravity **13.3 BLG**
- ABV ---
- IBU **68**
- SRM **63.2**
- Style **American 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **21.8 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **16.4 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **25 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **16.8 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 (66.7%)	80 %	7
Grain	Weyermann - Caramunich typ II	0.75 kg (12.5%)	73 %	120
Grain	Weyermann - Pszeniczny czekoladowy	0.5 kg (8.3%)	65 %	1100
Grain	Weyermann - Jęczmień palony	0.2 kg (3.3%)	65 %	1150
Adjunct	Weyermann - Jęczmień palony	0.15 kg (2.5%)	65 %	1150
Adjunct	Płatki Owsiane	0.4 kg (6.7%)	--- %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	30 g	60 min	8.9 %
Boil	Amarillo	30 g	30 min	8.9 %
Aroma (end of boil)	Simcoe	30 g	15 min	11.4 %
Dry Hop	Simcoe	60 g	3 day(s)	11.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

## Notes

- Leżakowanie 3 tygodnie minimum.  
Fermentacja burzliwa 10 dni w 18-19 stopniach  
Fermentacja cicha 5-7  
Chmiel na ostatnie 3 dni  
3,2g cukru na butelkę  
*Aug 20, 2016, 2:16 PM*