

# DRY STOUT MARYSI BITWA 1

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **24**
- SRM **30.4**
- Style **Dry Stout**

## 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 **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **70 C**, Time **10 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **70C**
- Keep mash **10 min** at **77C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3.2 kg (64%)	81 %	6
Grain	Strzegom Monachijski typ II	1 kg (20%)	79 %	22
Grain	Jęczmień palony	0.25 kg (5%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.25 kg (5%)	68 %	1200
Grain	Oats, Flaked	0.3 kg (6%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	40 g	60 min	5 %
Boil	Fuggles	10 g	10 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP004 - Irish Ale Yeast	Ale	Liquid	100 ml	White Labs