

# Sadza

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **35**
- SRM **31.6**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **28.8 liter(s)**

## Steps

- Temp **67 C**, Time **100 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **100 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **21 liter(s)** of **76C** water or to achieve **35.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.2 kg (58.3%)	80 %	5
Grain	Jęczmień niesłodowany	1.7 kg (23.6%)	75 %	2
Grain	Jęczmień palony	0.3 kg (4.2%)	55 %	985
Grain	Weyermann - Chocolate Wheat	0.7 kg (9.7%)	74 %	788
Grain	Żytni czekoladowy	0.3 kg (4.2%)	75 %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	7.9 %
Boil	Sybilla	20 g	10 min	6.8 %

## Notes

- Palony jęczmień dodany na drugą przerwę.  
*Sep 20, 2023, 3:08 PM*