

## #24 + żytnio owsiany stout

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **44**
- SRM **40.8**
- Style **Oatmeal Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **21.2 liter(s)**
- Total mash volume **27.8 liter(s)**

### Steps

- Temp **69 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21.2 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **50 min** at **69C**
- Keep mash **10 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (69.8%)	79 %	5
Grain	Black (Patent) Malt	0.41 kg (5.7%)	55 %	1300
Grain	Strzegom Czekoladowy jasny	1.2 kg (16.7%)	68 %	400
Adjunct	Płatki owsiane	0.33 kg (4.6%)	85 %	3
Adjunct	płatki żytnie	0.225 kg (3.1%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	32 g	30 min	13.5 %
Boil	Magnum	15 g	15 min	13.5 %
Boil	Loral	20 g	10 min	11 %
Boil	Loral	20 g	0 min	11 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	300 ml	---

### Notes

- 8 XII 2017  
start 1130

wsyp dodatków do 50stC  
wsyp Pale ale 65stC

Zacieranie start 1200

69stC - 30min  
+ czekoladowy jasny 10min  
67stC  
+ black 10min

Filtracja  
strat 1315 - 17,5BLG  
koniec 1400  
wyszło ok 37L !!!

Gotowanie 2h

wyszło 29L 15,5BLG

---- FERMENTACJA ----

16 XII - 7BLG  
18 XII - 7BLG  
A: - rozlew 13L  
2.0CO2 - 250ml + 46g cukry (12stC)  
Wyszło:  
20x 0,33L  
11x 0,5L  
1x 1L

B: cicha 12l:  
+1szt kiwi  
+ 108g skórki pomarańczy  
+ 10g imbir  
+320g wody

Rozlew 21 XII przy 7BLG  
0,25wody + 47g cukry  
*Dec 18, 2017, 12:39 AM*