

# Żytni stout

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **44**
- SRM **40.8**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.6 liter(s)**
- Total mash volume **15.4 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **11.6 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **10 min** at **76C**
- Sparge using **5.5 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.25 kg (58.4%)	81 %	4
Grain	Żytni	0.75 kg (19.5%)	85 %	8
Grain	Weyermann - Chocolate Rye	0.25 kg (6.5%)	20 %	493
Grain	Jęczmień palony	0.1 kg (2.6%)	55 %	985
Grain	Karmelowy żytni Strzegom	0.25 kg (6.5%)	75 %	150
Grain	Weyermann - Chocolate Wheat	0.25 kg (6.5%)	74 %	788

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	15.5 %
Aroma (end of boil)	East Kent Goldings	10 g	10 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Notes

- Wzorowane na Żytomierzu.  
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