

# Żytni Stout 12'Blg

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **35**
- SRM **26.8**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.3 liter(s)**
- Total mash volume **37.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **28.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **31.8 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	7 kg (74.1%)	83 %	6
Grain	Caramel/Crystal Malt - 40L	1.5 kg (15.9%)	74 %	150
Grain	Fawcett - Pale Chocolate	0.5 kg (5.3%)	71 %	600
Grain	Carafa	0.2 kg (2.1%)	70 %	1300
Grain	Weyermann - Chocolate Rye	0.25 kg (2.6%)	20 %	600

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	25 g	60 min	13 %
Boil	Citra	25 g	30 min	12 %
Aroma (end of boil)	Citra	25 g	5 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	10 g	MJ