

# Żytni stout

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **44**
- SRM **37.4**
- Style **Dry 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 **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.3 liter(s)**
- Total mash volume **32.4 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (49.4%)	80 %	5
Grain	Żytni	2 kg (24.7%)	85 %	8
Grain	Żytni czekoladowy	1 kg (12.3%)	70 %	700
Grain	Karmelowy żytni Strzegom	0.5 kg (6.2%)	75 %	150
Grain	Płatki żytnie	0.5 kg (6.2%)	60 %	5
Grain	Weyermann - Pszeniczny Czekoladowy	0.1 kg (1.2%)	73 %	1001

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	40 g	45 min	10.5 %
Aroma (end of boil)	East Kent Goldings	35 g	10 min	6.3 %
Aroma (end of boil)	Challenger	20 g	10 min	6.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	40 ml	---