

# Orkiszowo-Żytnie

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **40**
- SRM **9.4**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **31.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.1 liter(s)**
- Total mash volume **20.2 liter(s)**

## Steps

- Temp **52 C**, Time **5 min**
- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15.1 liter(s)** of strike water to **57.4C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	1 kg (19.8%)	85 %	4
Grain	Żytni	1 kg (19.8%)	85 %	8
Grain	Malteurop pilzneński	1.8 kg (35.6%)	80 %	4
Grain	Caraaroma	0.25 kg (5%)	78 %	400
Grain	Orkiszowy	1 kg (19.8%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10.5 %
Boil	Lublin (Lubelski)	35 g	10 min	3.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
S-33	Ale	Dry	11.5 g	---