

# ORDYNARNY BITTER DO ŻŁOPANIA

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **32**
- SRM **5.5**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

## Steps

- Temp **67 C**, Time **75 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (93%)	80 %	5
Grain	Caramunich® typ I	0.1 kg (2.3%)	73 %	80
Grain	Słód Caramunich Typ II Weyermann	0.2 kg (4.7%)	73 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	4 %
Boil	Fuggles	30 g	60 min	4.5 %
Boil	Fuggles	20 g	30 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Slant	100 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	WHIRLFLOC	1 g	Boil	5 min

Water Agent	GIPS PIWOWARSKI	10 g	Mash	75 min
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