

# bitter kontynentalny

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **30**
- SRM **6.4**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **13.1 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **9.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	castlemalting pilsen	2.2 kg (67.1%)	80.5 %	3
Grain	Simpsons - Maris Otter	0.7 kg (21.3%)	81 %	6
Grain	crystal light simpsons	0.38 kg (11.6%)	74 %	79

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	7.5 %
Aroma (end of boil)	Marynka	40 g	2 min	7.5 %
Aroma (end of boil)	styrian wolf	15 g	2 min	14.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale III	Ale	Liquid	1500 ml	---

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	4 g	Mash	---