

# Bitter

- Gravity **10.2 BLG**
- ABV ---
- IBU **36**
- SRM **12.2**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**

## Mash step by step

- Heat up **12.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (58.1%)	80 %	5
Grain	Strzegom Wiedeński	0.5 kg (11.6%)	79 %	10
Grain	Pale Crystal	0.5 kg (11.6%)	75 %	90
Grain	Biscuit Malt	0.5 kg (11.6%)	79 %	50
Grain	Płatki owsiane	0.3 kg (7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	40 g	60 min	4.5 %
Boil	Fuggles	20 g	60 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11 g	Danstar

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	15 min

## Notes

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

- Mech irlandzki dał dziwny (??) efekt. Wersja poprawiona  
*Nov 6, 2016, 10:34 PM*