

# Wigowie i Torysi - Special Bitter

- Gravity **10 BLG**
- ABV **4 %**
- IBU **29**
- SRM **6.7**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (75%)	85 %	7
Grain	Wheat, Torrified	0.5 kg (12.5%)	79 %	4
Grain	Caramel/Crystal Malt - 40L	0.5 kg (12.5%)	74 %	79

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	50 g	60 min	4.5 %
Whirlpool	East Kent Goldings	50 g	5 min	4.5 %
Dry Hop	East Kent Goldings	100 g	2 day(s)	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Liquid	1500 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	5 g	Boil	20 min

## Notes

- Fermentacja:  
Burzliwa (7-8 dni w 18-19 st. C)  
Cicha (7-8 dni w 18-19 st. C)

Butelkowanie:  
Syrop cukrowy na refermentacje (80g cukru w 300 ml wody)

Dojrzewanie piwa:  
3 tygodnie w temperaturze 17-18 st. C.  
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