Bitter Gdański

- Gravity 13.1 BLG
- ABV 5.3 %
- IBU 47
- SRM **11.2**
- Style Extra Special/Strong Bitter (English Pale Ale)

Batch size

- Expected quantity of finished beer 23 liter(s)
- Trub loss 5 %
- Size with trub loss 24.1 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 29 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 18 liter(s)
- Total mash volume 24 liter(s)

Steps

- Temp **67 C**, Time **60 min** Temp **72 C**, Time **5 min**
- Temp 78 C, Time 2 min

Mash step by step

- Heat up 18 liter(s) of strike water to 74.8C
- Add grains
- Keep mash 60 min at 67C
- Keep mash 5 min at 72C
- Keep mash 2 min at 78C
- Sparge using 17 liter(s) of 76C water or to achieve 29 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	4 kg <i>(66.7%)</i>	81 %	6
Grain	Weyermann - Pale Ale Malt	1 kg (16.7%)	85 %	7
Grain	Słód Caramunich Typ II Weyermann	1 kg <i>(16.7%)</i>	73 %	120

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	50 g	60 min	5.1 %
Boil	Fuggles	50 g	60 min	4.5 %
Aroma (end of boil)	Fuggles	20 g	5 min	4.5 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11.5 g	Danstar

Notes

Zadane drożdże płynne Fermentum Mobile FM-11 - Wichrowe wzgórza.

